THOMSON MULTIMEDIA

VIDEO

Brandt FERGUSON NORDMENDE SABA TELEFUNKEN THOMSON

PARTS LIST
LISTE PIECES DETACHEES
ERSATZTEILLISTE
LISTA PARTI DI RICAMBIO
LISTA DE PIEZAS DE REPUESTO

FERGUSON
FV301LV
Chassis T6325UR

MODULES

MAIN	**MAINR6BU34**	
KB	**KDBR6TA1**	**20705560**
PRER	**HABV3R4A222H**	**20200450**

FP044,051	400MA 50V	⚠ 20453760
II050	TDA9817	20642480
IK001	TMP47C416F-H897 S1T FLAT	20854210
IP050	K324PG(CNY75GA)	⚠ 10536210
IS001	LA7286	20555970
IT001	TMP90CS74EDF- 6744 E1F FLAT	20860220
IT002	TA7291S	20264760
IT003	TB6515AP	20257760
IT004	ST24C08/CB1	20316870
IT005	PST7032MT	20250410
IV001	LA71528AM FLAT	20891980
IV100	LC89977M FLAT	20725780
IV401	74HC4053 FLAT	70130000
IV500	LA7217M	20673310
IX001	HEF4052BT/BU4052BF/ MC14052BD FLAT	11007992
IX002	MC14053BD/ HEF4053BT FLAT	10452500
IX003,004	MM1226XFBE FLAT	20680930
IY001	SDA5650X FLAT	20700310
ZK001	GP1U283X	20384040

GT005,006	PT493F	30744200
TI020	MMBTH10L SMD	16006500
TI055,**TP**086, **TT**003,006, **TV**001,003,004, 005,008,012, 014,019,401, **TW**001,**TX**204, 214	BC848B SMD	16006290
TK923,**TP**071, 082,**TT**013, **TV**013,020,402, **TZ**032,033,057	BC858B SMD	16006330
TP020	BUL312HI	20683690
TP022,096, **TW**006	BC337-40	45001466
TP023,095, **TT**005	2SA1020Y	16003740
TS004,**TV**002, 010,018,**TX**350, 352,**TZ**001,010	RN1402 (TE85L/R) SMD	10966200
TS030	2SC1959-Y	70382600
TV009,**TX**351	RN2402 SMD	20205800
TW002	RN2403 SMD	50835400
TW003	2SC2236Y	16000220
TW004	BC548B	16000930
TW005	2SA1300GR	20818780
TW083	BC368	16000610

DJ040	ZMM2,7 SMD	16030100
DK040	ZMM4,7 SMD	90566520
DP001,002,003, 004	BYW27-1000	10455390
DP005	ZMM33	10376460
DP012,025,040, 053,056	BA159	16008120
DP019,023,031, 051,061	FR104	20569370
DP024,037,071, 081,082,096, 097,**DT**013, **DW**007,**DX**350, 351,352,**DZ**002, 004	LL4148 SMD	16012450
DP033	MTZJ22D	20691250
DP034	ZPD6,8	44074501
DP044	ZMM3,9 SMD	16030210
DP054	MTZJ30B	20747460
DP064	BYV28-150	20429390
DP066	1N5822	44058204
DP067	MA2062-A 6V	20707320
DP073	MTZ4.3C	20656920
DT067,**DW**010	BZX55B5V1/ZPD5V1 2%	44035702
DV002,003	LL4448 SMD	50856852
DV401	1SS181 SMD	10377500
DW006	BZX55B12	30948680
DW015	RLS4153	20669330
DW086,087	1N4001	16008160
DZ005	1N4148	44009209
GK923	LTL4221NLC	20655190
GT002	GL451V	10627200
GT003,004	GP1S562	10137670

FI010	J1952M FOS	20687740
FI090	6M0HZ	48042300
QI070	6M0HZ	20707500
QK001	8M0HZ	10254430
QT001	17M734475HZ	20325840
QT002	32K768HZ	48079600

R : RECYCLED PART
: PIECE RECYCLEE
: AUSTAUSCHTEILE
: RICAMBIO RICICLATO
: MODULO REPROCESADO

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REV. N° 0 00 / 00 **00000000**

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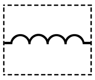
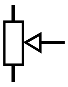
QT003	16M0HZ		20264770
QV002	4M433619HZ		20668940
QV500	500K0HZ		20676810



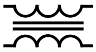
FI030	77M8HZ		20756530
LS030	70K0HZ		20698900



PI050	22K0 OHM 100MI0W		20693760

RP012	0R22 OHM 5% 0,30W	⚠	13086930
RP020	4R7 OHM 5% 3,0W		20709130
RP023	0R33 OHM 5% 0,30W	⚠	10099910
RP053,056	10R0 OHM 5% 0,25W	⚠	15009580
RP058	27R0 OHM 5% 0,25W	⚠	15009840
RW001	4R7 OHM 5% 0,25W	⚠	35032200

CP001	100N0F 20% 275V	⚠	20491410
CP010	47UOF 20% 385V	⚠	50844400
CP021	1N0F 10% 1K0V		43441400
CP050	1N0F 20% 400V	⚠	20822690
CP061	220U0F 20% 35V	⚠	20720850
CT053	0,1F 5,50V		50876840



LP001		⚠	20461540
LP050	SMT17	⚠	10444940

OTHER PARTS
AUTRES PIECES
SONSTIGE TEILE
ALTRE PARTI
OTRAS PIEZAS

0010M	FE6200 TUNER/MODULATOR FE6200 TETE/MODULATEUR FE6200 TUNER/MODULATOR FE6200 TUNER/MODULATORE FE6200 SINTONIZADOR/ MODULADOR	R	20704750
BP001	MAINS SOCKET PRISE SECTEUR NETZANSCHLUSSBUCHSE PRESA RETE TOMA RED	⚠	20894220
BS031	CABLE CABLE NAPPE FOLIENKABEL CAVO DI COLLEGAMENTO CABLE		10120790
BT001	CONNECTOR CONNECTEUR STECKVERBINDUNG 10 POL. CONNETTORE CONECTOR		10137630
BT002	CABLE CABLE NAPPE FOLIENKABEL CAVO DI COLLEGAMENTO CABLE		10167420
BT003	CABLE CABLE NAPPE FOLIENKABEL CAVO DI COLLEGAMENTO CABLE		10161260
BX001	SCART SOCKET PRISE PERITEL EURO-AV-BUCHSE EUROPRESA NORMALIZZATA EUROCONECTOR		10458040
FP001	1AT TIME-LAG FUSE 1AT FUSIBLE TEMPORISE 1AT SICHERUNG 1AT FUSIBILE TEMPORIZZATO 1AT FUSIBLE TEMPORIZADO	⚠	48070100
GKF01	DISPLAY AFFICHEUR ANZEIGE VISUALIZZATORE VISUALIZADOR		20809180
GT001	SENSOR CAPTEUR SENSOR SENSORE SENSOR		20215160
MT001	STATOR STATOR TAMBOUR ROTATIF STATORKERN STATORE TAMBURO ROTATIVO ESTATOR TAMBOR ROTATIVO		10150560
SK001,002, 003,005,006, 007,008,010	MICROSWITCH MICRO CONTACTEUR MIKROSCHALTER MICROINTERRUTTORE MICROCONTACTOR		30909938
ST001	MICROSWITCH MICRO CONTACTEUR MIKROSCHALTER MICROINTERRUTTORE MICROCONTACTOR		10137610

EQUIPMENT/PRESENTATION
EQUIPEMENT/PRESENTATION
AUSSTATTUNG/GEHAEUSE
PARTI VARIE
EQUIPO/PRESENTACION

RC6X03NX REMOTE CONTROL RC6X03NX TELECOMMANDE RC6X03NX FERNBEDIENUNG RC6X03NX TELECOMANDO RC6X03NX TELEMANDO		20777160
POWER SUPPLY LEAD (UK) CORDON D’ALIMENTATION (UK) NETZKABEL (UK) CAVO DI ALIMENTAZIONE (UK) CABLE DE ALIMENTACION (UK)	⚠	20350080
ANTENNA CABLE CORDON ANTENNE ANTENNENKABEL CAVO ANTENNA CABLE ANTENA	⚠	10080190
FRONT PANEL FACADE FRONTPLATTE PANNELLO FRONTALE PANEL FRONTAL		20897760
CASSETTE FLAP VOLET CASSETTE CASSETTENKLAPPE SPORTELLO CASSETTA TAPA CASSETTE		20897430
FRONT FLAP VOLET FACADE FRONTKLAPPE SPORTELLO FRONTALE TAPA FRONTAL		20897440
COVER UPPER COUVERCLE SUPERIEUR GEHAUSEOBERTEIL COPERCHIO SUPERIORE TAPA SUPERIOR		20739020
FITTING FRONT CALE AVANT POLSTER VORN DISTANZIATORE ANTERIORE CALZO DELANTERA		20869570
FITTING REAR CALE ARRIERE POLSTER HINTEN DISTANZIATORE POSTERIORE CALZO TRASERA		20700070
FOLDING BOX EMBALLAGE CARTON KARTON IMBALLAGGIO CARTONE EMBALAJE CARTON		20739010

MECHANISM
MECANIQUE
MECHANIK
MECCANICA
MECANISMO

UPPER DRUM S2P LP TAMBOUR ROTATIF S2P LP KOPFTROMMELOBERTEIL S2P LP TAMBURO TESTINA SUPERIORE S2P LP TAMBOR ROTATIVO S2P LP	10288390
DRUM ASSY,S2P LP TTN4 ENS MOTEUR/TAMB S2P LP TTN4 KOPFTROMMEL S2P LP TTN4 KPL. ASSIEME MOTORE/TAMBURO S2P LP TTN4 CONJUNTO MOTOR/TAMBOR S2P LP TTN4	10145320

MAINTENANCE TOOLS
MAINTENANCE
WERKZEUG FUER DAS GERAET
UTENSILI DI MANUTENZIONE
MANTENIMIENTO

ALIGNMENT TAPE MH-2 CASSETTE DE REFERENCE MH2 ABGLEICHBAND MH-2 CASSETTA DI ALLINEAMENTO MH-2 CASSETTE DE REFERENCIA MH-2	76000672
TORQUE GAUGE 600G MESUREUR DE COUPLE 600G DREHMOMENTMESSER 600G TORSIOMETRO 600G MEDIDOR DE PAR 600G	76000652
BACK TENSION MESUREMENT CASSETTE CASSETTE DYNAMOMETRIQUE BANDRUECKZUG MESSCASSETTE CASSETTA DINAMOMETRICA CASSETTE DINAMOMETRICA	76000651
KIT CLIPS R4000 ENSEMBLE DE CLIPS R4000 KIT CLIPS R4000 ASSIEME CLIPS R4000 CONJUNTO CLIPS R4000	20343220
MAINTENANCE KIT R4000 ENSEMBLE MAINTENANCE R4000 WERKZEUG KIT R4000 ASSIEME MANUTENZIONE R4000 CONJUNTO MANTENIMIENTO R4000	20343140
ASSY DRUM DISASSEMBLY ENS DEMONTAGE TAMBOUR AUSTAUSCH DER KOPFTROMMELEINHEIT KIT SOSTITUZIONE TESTINE CONJUNTO DESMONTAJE TAMBOR	10298540

INSTRUCTIONS
NOTICES
ANLEITUNGEN
ISTRUZIONI
MANUALE

FV301LV IG FE GB FV301LV NI FE GB FV301LV AA FE GB FV301LV II FE GB FV301LV II FE GB	20907430
FV301LV UM FE GB FV301LV NU FE GB FV301LV BA FE GB FV301LV IU FE GB FV301LV IU FE GB	20907440
R6000 SERVICE MANUAL EUROPE KIT R6000 DOC TECHNIQUE EUROPE KIT R6000 TECHNISCHE DOKUMENT. EUROPE KIT R6000 DOCUMENTAZIONE TECNICA EUROPE KIT R6000 DOCUMENTACION TECNICA EUROPE KIT	35051790
FV301LV PARTS LIST FV301LV LISTE PIECES DETACHEES FV301LV ERSATZTEILLISTE FV301LV LISTA PARTI DI RICAMBIO FV301LV LISTA PIEZAS DE REPUESTO	35066770

FOR THE OTHER PARTS PLEASE SEE R4/5/6000 MECHANISM PARTS

POUR LES AUTRES PIECES SE REPORTER A LA LISTE R4/5/6000 MECANIQUE

FUR DIE ANDERE TEILE SEHEN SIE BITTE DIE ERSATZTEILELIST R4/5/6000 MECHANIK

RIFERIRSI A LISTA PARTI DI RICAMBIO R4/5/6000 MECCANICA

REFERIRSE A LA LISTA DE PIEZAS DE REPUESTO R4/5/6000 MECANISMO

35044020

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THOMSON MULTI MEDIA

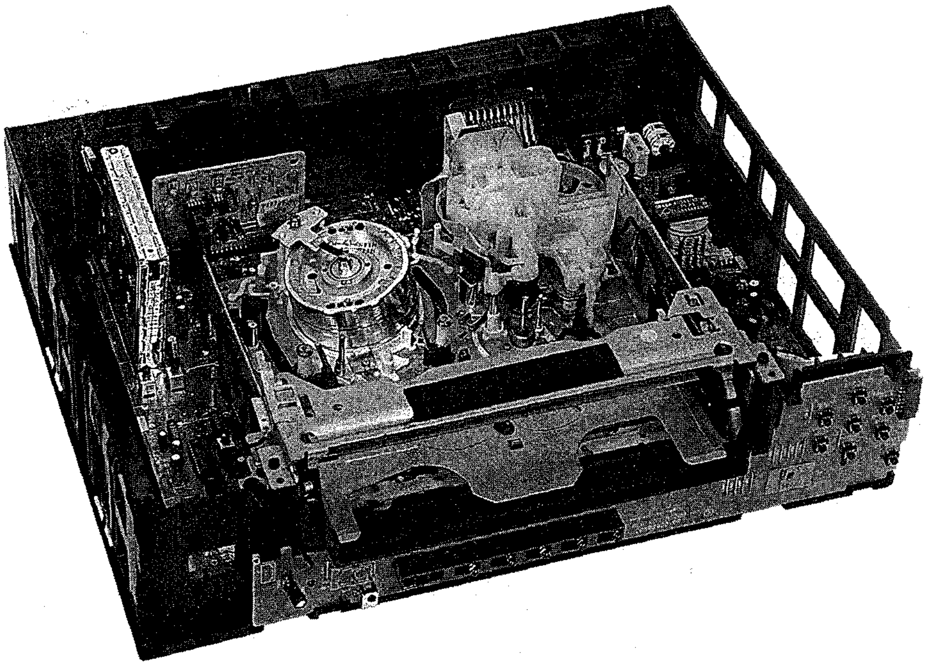
Brandt FERGUSON SABA **TELEFUNKEN** **THOMSON**

VIDEO

SERVICE MANUAL
DOCUMENTATION TECHNIQUE
TECHNISCHE DOKUMENTATION
DOCUMENTAZIONE TECNICA
DOCUMENTACION TECNICA

R/T 6000

Additive to SM | 350 411 70
Additif au SM
Ergänzung zum SM
Aggioznamento del SM
Suplemento al SM



⚠

WARNING : *Before servicing this chassis read the safety recommendations.*
ATTENTION : *Avant toute intervention sur ce châssis, lire les recommandations de sécurité.*
ACHTUNG : *Vor jedem Eingriff auf diesem Chassis, die Sicherheitsvorschriften lesen.*
ATTENZIONE : *Prima di intervenire sullo chassis, leggere le norme di sicurezza.*
IMPORTANTE : *Antes de cualquier intervención, leer las recomendaciones de seguridad.*

Code : 350 669 80 - 0898 / 14M - R/T6000 Print. MALGOGNE/SAILLOUR - AVRILLÉ

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⚠ Do not disconnect modules when they are energized!
Repairs on power supply section are to be carried out only with isolating transformer.

Ne pas retirer les modules lorsqu' ils sont sous tension. N'effectuer les travaux de maintenance sur la partie reliée au secteur (Switch Mode) qu'au travers d'un transformateur d'isolement.

Module nicht bei eingeschaltetem Gerät entfernen!
Servicearbeiten am Netzteil nur unter Verwendung eines Regeltrenntrafos durchführen.

Non scollegare le piastre quando sono alimentate!
Per le riparazioni sulla sezione alimentatore, utilizzare un trasformatore isolatore.

No desconectar los módulos cuando están activados. Las reparaciones en la sección de alimentación de energía deben ser ejecutadas solamente con un transformador de separación.

⚠ Indicates critical safety components, and identical components should be used for replacement. Only then can the operational safety be garanteed.

Le remplacement des éléments de sécurité (repérés avec le symbole ⚠) par des composants non homologués selon la Norme CEI 65 entraine la non-conformité de l'appareil. Dans ce cas, la responsabilité du fabricant n'est plus engagée.

Wenn Sicherheitsteile (mit dem Symbol ⚠ gekennzeichnet) nicht durch Original - Ersatzteile ersetzt werden, erlischt die Haftung des Herstellers.

La sostituzione dei componenti di sicurezza (evidenziati con il segno ⚠) con componenti non omologati secondo la norma CEI 65 comporta la non conformitá dell'apparecchio. In tal caso è "esclusa la responsabilità " del costruttore.

La sustitución de elementos de seguridad (marcados con el simbolo ⚠) por componentes no homologados segun la norma CEI 65, provoca la no conformidad del aparato. En ese caso, el fabricante cesa de ser responsable.

MEASUREMENT CONDITIONS - CONDITIONS DE MESURES - MESSBEDINGUNGEN CONDIZIONI DI MISURA - CONDICIONES DE MEDIDAS

RECEIVER :
On UHF,input level : 1 mV, bar test pattern :
- PAL, I standard, 100% white.

Via the scart socket, input level : 1 Vpp, bar test pattern :

Colour, contrast and brightness at mid-position, sound at minimum.
Programme selected : PR 01.

DC voltages measured between the point and earth using a digital voltmeter.

RECEPTEUR :
En UHF, niveau d'entrée 1 mV mire de barres
- SECAM, Norm L, Blanc 100%.

Par la prise Péritélévision, niveau d'entrée 1 Vcc, mire de barres .

Couleur, contraste, lumière à mi-course, son minimum.
Programme affecté PR 01.

Tensions continues relevées par rapport à la masse avec un voltmètre numérique.

EMPFÄNGER :
Bei UHF Eingangspegel 1 mV, Farbbalken :
- PAL, Norm G, Weiss 100%.

Über die Scartbuchse : Eingangspegel 1 Vss, Farbbalken :

Farbe, Kontrast, Helligkeit in der Mitte des Bereichs, Ton auf Minimum.
Zugeordnetes Programm PR 01.

Gleichspannungen mit einem digitalen Voltmeter zur Masse gemessen.

RICEVITORE :
In UHF, livello d'entrata 1 mV, monoscopio con barre :
- PAL, norma G. bianco 100%.

Via SCART, livello d'entrata 1 Vpp, monoscopio con barre :

Colore, Contrasto, Luminositá a meta corsa, Suono minimo.
Programma designato PR 01.

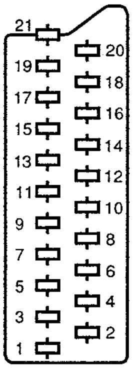
Tensioni continue rilevate rispetto alla massa con un voltametro digitale.

RECEPTOR :
En UHF, nivel de entrada 1 mV, mira de barras :
- PAL, norma G, blanco 100%.

Por la toma Peritelevision, nivel de entrada 1 Vpp mira de barra.

Color, Contraste, luz a mitad de carrera, Sonido minimo.
Programa afectado PR 01.

Tensiones continuas marcadas en relacion a la masa con un voltimetro digital.



NOTE : MAIN ... etc. identifies each pcb module.

NOTE : MAIN ... etc. repères des platines constituant l'appareil.

HINWEIS : MAIN ... usw. Kennzeichnung der Platinen, aus denen das Gerät zusammengesetzt ist.

NOTA : MAIN ... ecc. indicazioni delle piastre che costituiscono l'apparecchio.

NOTA : MAIN ... etc. marcas de las placas que constituyen el aparato.

		ENGLISH	FRANÇAIS	DEUTSCH	ITALIANO	ESPAÑOL
1	◯→	AUDIO "R"	AUDIO "D"	AUDIO "R"	AUDIO "D"	AUDIO "D"
2	→◯	AUDIO "R"	AUDIO "D"	AUDIO "R"	AUDIO "D"	AUDIO "D"
3	◯→	AUDIO "L"	AUDIO "G"	AUDIO "L"	AUDIO "S"	AUDIO "I"
4	⊥	AUDIO	AUDIO	AUDIO	AUDIO	AUDIO
5	⊥	"BLUE"	"BLEU"	"BLAU"	"BLU"	"AZUL"
6	→◯	AUDIO "L" MONO	AUDIO "G" MONO	AUDIO "L" MONO	AUDIO "S" MONO	AUDIO "I" MONO
7	→◯	"BLUE"	"BLEU"	"BLAU"	BLU	AZUL
8	→◯	SLOW SWITCH	COMMUT. LENTE	AV UMSCHALTUNG	"COMMUTAZIONE LENTA"	"CONMUTACION LENTA"
9	⊥	"GREEN"	"VERT"	"GRÜN"	"VERDE"	"VERDE"
10	NC					
11	→◯	"GREEN"	"VERT"	"GRÜN"	"VERDE"	"VERDE"
12	NC					
13	⊥	"RED"	"ROUGE"	"ROT"	"ROSSO"	"ROJA"
14	NC					
15	→◯	"RED"	"ROUGE"	"ROT"	"ROSSO"	"ROJA"
16	→◯	FAST SWITCH	COMMUT. RAPIDE	AUSTASTUNG	"COMMUTAZIONE RAPIDA"	"CONMUTACION RAPIDA"
17	⊥	VIDEO	VIDEO	VIDEO	VIDEO	VIDEO
18	⊥	FAST SWITCH	COMMUT. RAPIDE	AUSTASTUNG	"COMMUTAZIONE RAPIDA"	"CONMUTACION RAPIDA"
19	◯→	VIDEO	VIDEO	VIDEO	VIDEO	VIDEO
20	→◯	VIDEO OR "SYNC"	VIDEO SYNCHRO	VIDEO ODER SYNCHRO	VIDEO O SINCRO	VIDEO O SINCRO
21	◯→	PLUG SCREEN BOX	BLINDAGE PRISE	ABSCHIRMUNG DES STECKERS	INVOLUCRO METALLICO DELLA PRESA	BLINDAJE DEL ENCHUFE

→◯ : INPUT - ENTRÉE - EINGANG - ENTRATA - ENTRADA • ◯→ : OUTPUT - SORTIE - AUSGANG - USCITA - SALIDA • ⊥ : EARTH - MASSE - MASSE - MASSA - MASA

TECHNICAL DATA AND COMPOSITION OF VIDEO RECORDERS
CARACTERISTIQUES TECHNIQUES ET COMPOSITION DES MAGNETOSCOPES
TECHNISCHE DATEN UND ZUSAMMENSETZUNG VIDEORECORDERS
CARATTERISTICHE TECNICHE E COMPOSIZIONE VIDEOREGISTRATORI
CARACTERISTICAS TECNICAS Y COMPOSICIÓN DE LOS VÍDEOS

Power requirement:	220 - 240 V ± 10%	4 Heads Helical Scan system:	Consumption	17 W
Alimentation:	50/60Hz	4 têtes video:	Consommation:	4.8 W STD-BY
Netzeil:		4 Video-Köpfe: * / **	Leitstungsaufnahme	
Alimentazione:		4 Testine video	Consumo:	
Alimentación:		4 Cabezas video:	Consumo:	

Programming:	**SHOWVIEW**	2 Heads Helical Scan system:	Sound:	Mono
Programmation:		2 têtes video:	Son:	
Timer:		2 Video-Köpfe:	Ton:	
Programmazione:		2 Testine video	Suono:	
Programación:		2 Cabezas video:	Sonido:	

Tape speed:	SP	Tape format:	VHS	Power save:	30 min.
Vitesse de défilement:	SP/LP *	Format video:		Sécurité secteur:	
Bandgeschwindigkeit:	SP/LP/SLP **	Video-system:		Gangreserve:	
Velocitá del nastro:		Formato video:		Sicurezza alimentazione:	
Velocidad de la cinta:		Formato vídeo:		Seguridad red:	

SP = 23,39 mm/sec.

LP = 11,70 mm/sec.

SLP = 33,35 mm/sec. (Only NTSC PB)

For service information on the deck mechanism see separate publication "R4000 SERIES MECHANICAL ADJUSTMENTS" and "R4000 DRUM DISASSEMBLY / ASSEMBLY SERVICE MANUAL".

Pour toute intervention ou réglage sur la partie mécanique, se reporter au FASCICULE MECANIQUE R4000 ainsi qu'à son additif: "DEMONTAGE DU TAMBOUR SUR LES MAGNETOSCOPES EQUIPES DU CHASSIS R4000".

Informationen über mechanische Einstellungen entnehmen Sie bitte dem Handbuch "MECHANISCHE EINSTELLUNGEN R4000"

Ulteriori informazioni sulla meccanica si possono essere trovare nelle seguenti pubblicazioni: "SERIE R4000 REGOLAZIONI MECCANICHE" e R4000 MANUALE DI SERVIZIO PER IL DISASSEMBLAGGIO DEL TAMBURO".

Para información de servicio técnico sobre el mecanismo de la platina, consulte la documentación separada "AJUSTES MECANICOS SERIES R4000" y "MANUAL DE SERVICIO ENSAMBLAJE DEL TAMBOR R4000"

SCHEMATIC DIAGRAMS & PCBs

Reference	Setup Number	Interconnections Diagrams	Main PCB	Pow/TU/FI	Main Servo	Main Video	I/O Interface	Secam	KDB/FCB	JSB
THOMSON										
V2700	**3A178400B49003**	13-14	79-84	**43-46**	51-58	60-62 65-66	85-87	-	21-24	-
V4700	**3A178A00B49083**	13-14	79-84	**43-46**	51-58	60-62 65-66	85-87	-	21-24	-
V4800C	**3A178E00B49083**	13-14	79-84	**43-46**	51-58	60-62 65-66	85-87	-	**15-18**	-
VP2750	**02108444B09103**	13-14	79-84	67-70 75-78	51-58	59 63-66	85-87	45-50	21-24	-
VP2751	**18228840B1B383**	13-14	79-84	67-70 75-78	51-58	60-66	85-87	-	**19-22**	-
VP2757	**79218848B8B383**	13-14	79-84	67-70 75-78	51-58	60-66	85-87	-	**19-22**	-
VP2800F	**02108404B09103**	13-14	79-84	67-70 75-78	51-58	**36-38**	85-87	45-50	**27-30**	-
VP2850F	**02108444B09123**	13-14	79-84	67-70 75-78	51-58	**36-38**	85-87	45-50	**27-30**	**5**
VP2850G	**18128044B19103**	13-14	79-84	67-70 75-78	51-58	60-66	85-87	-	**27-30**	-
VP4780	**02208E45B0B3A3**	13-14	79-84	67-70 75-78	51-58	59 63-66	85-87	45-50	**19-22**	**5**
VP4781	**18228A41B1B3A3**	13-14	79-84	67-70 75-78	51-58	60-66	85-87	-	**19-22**	**5**
VP4800F	**02108E04B09183**	13-14	79-84	67-70 75-78	51-58	**36-38**	85-87	45-50	**27-30**	-
VP4850F	**02108E44B091A3**	13-14	79-84	67-70 75-78	51-58	**36-38**	85-87	45-50	**27-30**	**5**
VTH721	**1A1188040411C6**	13-14	79-84	**39-42**	51-58	**33-35**	**31-32**	-	21-24	-

SCHEMATIC DIAGRAMS & PCBs

Reference	Setup Number	Interconnections diagrams	Main PCB	Pow/TU/FI	Main Servo	Main Video	I/O Interface	Secam	KDB/FCB	JSB
TELEFUNKEN										
M9820G	18128804B19183	13-14	79-84	67-70 75-78	51-58	60-66	85-87	-	7-10	-
M9825G	18128844B19183	13-14	79-84	67-70 75-78	51-58	60-66	85-87	-	7-10	-
M9840G	18128E44B191A3	13-14	79-84	67-70 75-78	51-58	60-66	85-87	-	7-10	**5**
SABA										
EV100F	02008404401103	13-14	79-84	67-70 75-78	51-58	36-38	85-87	45-50	41-44	-
EV100G	18028004719103	13-14	79-84	67-70 75-78	51-58	60-66	85-87	-	41-44	-
EV200G	18128004B19123	13-14	79-84	67-70 75-78	51-58	60-66	85-87	-	**23-26**	**6**
EV400F	02108E04801183	13-14	79-84	67-70 75-78	51-58	36-38	85-87	45-50	**23-26**	-
EV400G	18028E04411183	13-14	79-84	67-70 75-78	51-58	60-66	85-87	-	41-44	-
FERGUSON										
FV301LV	7911880CB89183	13-14	79-84	67-70 75-78	51-58	60-66	85-87	-	**15-18**	-
BRANDT										
VK130PS	0100840440100B	13-14	79-84	67-74	51-58	59 63-66	85-87	45-50	17-20	-
VK241PS	02008404401103	13-14	79-84	67-70 75-78	51-58	**36-38**	85-87	45-50	**11-14**	-
VK441PS	02008E04401183	13-14	79-84	67-70 75-78	51-58	**36-38**	85-87	45-50	**11-14**	-

GB Regarding pages not weaved, please refer to Service Manual (350 411 70).

F Pour les pages non tramées, veuillez vous reportez à la documentation de base (350 411 70).

D Seitenzahlen, die in der Tabelle nicht grau hinterlegt sind, beziehen sich auf das Service-Manual (350 411 70).

I Per gli argomenti non trattati in questo aggiornamento, fare riferimento al manuale di servizio relativo al telaio R6000 (350 411 70).

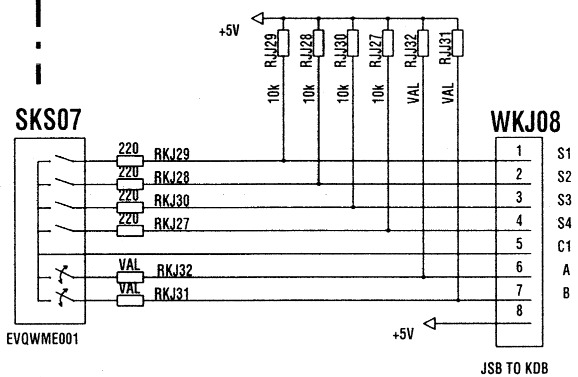
E Para las páginas no sombreadas, ver la documentación básica (350 411 70).

JOG & SHUTTLE BOARD - PLATINE JOG & SHUTTLE - LEITERPLATTE JOG & SHUTTLE - PIASTRA JOG & SHUTTLE - PLATINA JOG & SHUTTLE

SCHEMATIC DIAGRAM - SCHEMA DE PRINCIPE - SCHALTBILD - SCHEMA - ESQUEMA

JOG & SHUTTLE BOARD

CIRCUIT USE IN 97-0B AND 97-0C

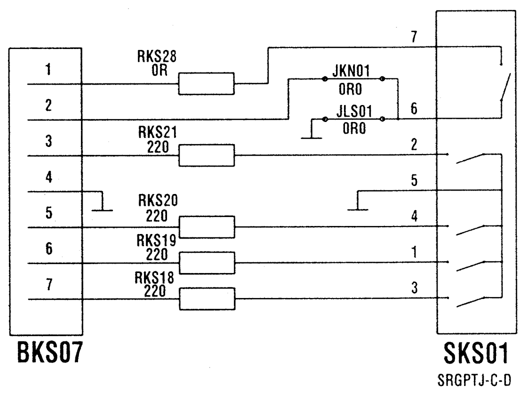

+5V
RJJ29
RJJ28
RJJ30
RJJ27
RJJ32
RJJ31
10k
10k
10k
10k
VAL
VAL
SKS07
WKJ08
220
RKJ29
220
RKJ28
220
RKJ30
220
RKJ27
VAL
RKJ32
VAL
RKJ31
1
2
3
4
5
6
7
8
S1
S2
S3
S4
C1
A
B
+5V
EVQWME001
JSB TO KDB

* NOTE: RESISTORS VALUE DEPEND ON KDB MICRO-P. USED.

JSB

DESCRIPTION	RKJ32/RKJ31	RJJ32/RJJ31
EQU JSB R6 IL1	220R	10K
EQU JSB R7 IL2	0R	

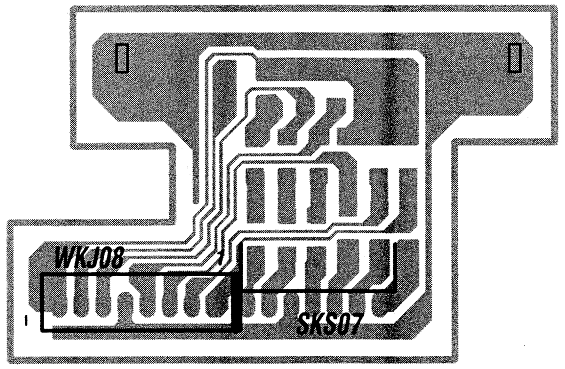
FROM KDB WITH 8 BIT uP & NFDP	FROM KDB WITH 4 BIT uP & SFDP
72(97-3C)	PLAY_KEY(97-3C)
68(97-3C)	NC(97-3C)
30	21
GND	GND
29	20
28	19
27	18


1
2
3
4
5
6
7
RKS28
0R
JKN01
0R0
JLS01
0R0
RKS21
220
RKS20
220
RKS19
220
RKS18
220
7
6
2
5
4
1
3
BKS07
SKS01
SRGPTJ-C-D

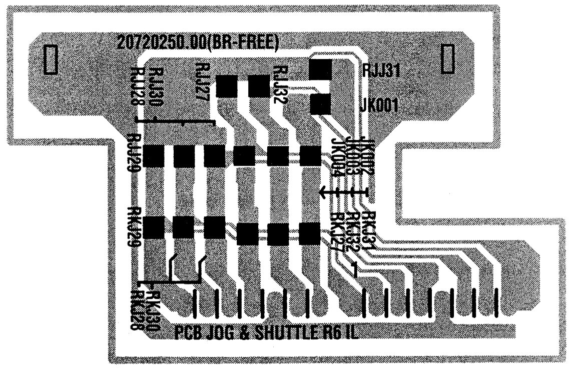
JSB

DESCRIPTION	PARTS	
	JKN01	JLS01
SHS R7 HN1 (SFDP)	-	*
SHS R7 HN2 (NFDP)	*	-

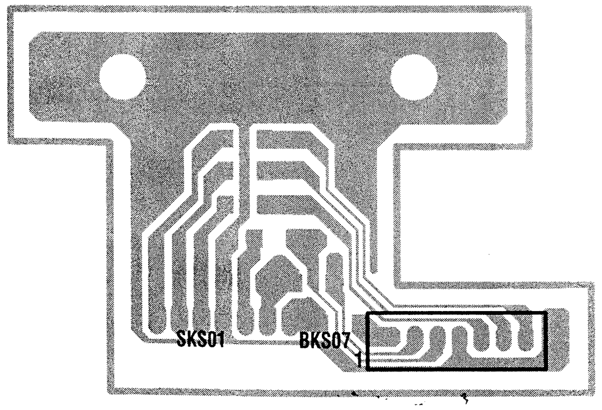
Component side -Côté composants - Bestückungsseite - Lato componenti - Lado componentes


WKJ08
SKS07
1

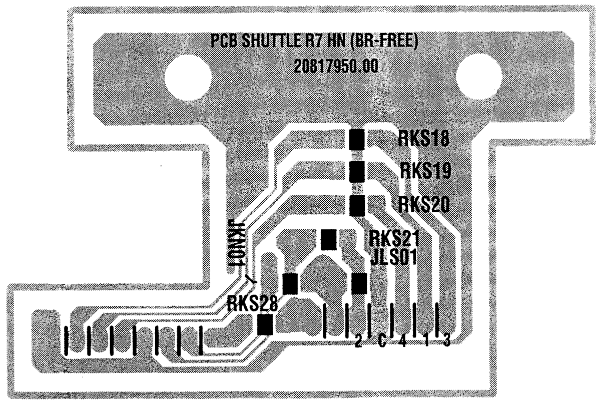
Solder side -Côté cuivre - Lötseite - Lato saldature - Lado del cobre


20720250.00(BR-FREE)
RJJ30
RJJ28
RJJ27
RJJ32
RJJ31
JK001
JK002
JK003
JK004
RJJ29
RKJ29
RKJ31
RKJ32
RKJ27
RKJ30
RKJ28
1
PCB JOG & SHUTTLE R6 IL

Component side -Côté composants - Bestückungsseite - Lato componenti - Lado componentes

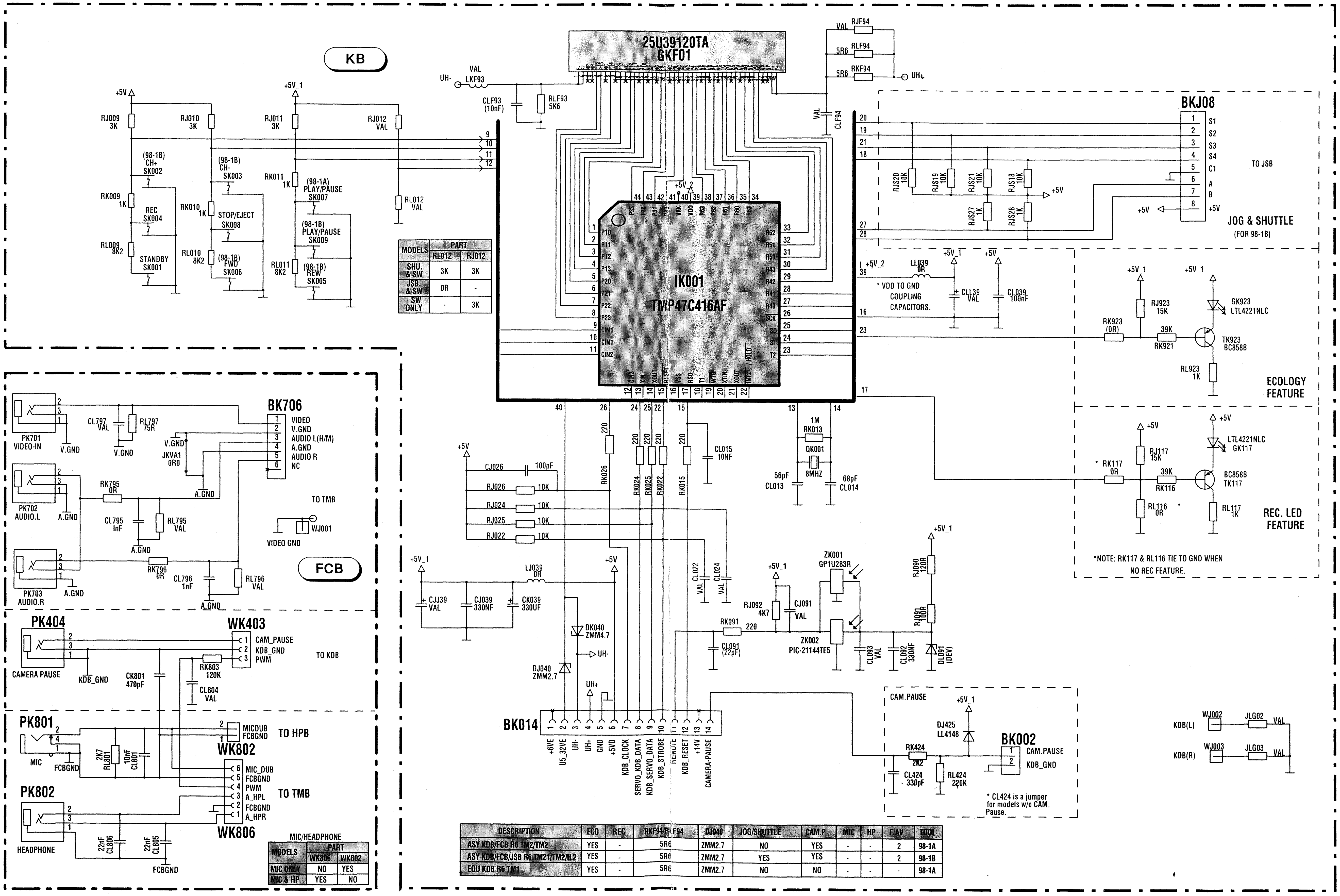

SKS01
BKS07
1

Solder side -Côté cuivre - Lötseite - Lato saldature - Lado del cobre


PCB SHUTTLE R7 HN (BR-FREE)
20817950.00
RKS18
RKS19
RKS20
RKS21
JLS01
JKN01
RKS28
2
C
4
1
3

KEYBOARD WITH DISPLAY - PLATINE DE COMMANDES AVEC AFFICHEUR - BEDIENTEIL MIT DISPLAY - TASTIERA CON DISPLAY - PLATINA MANDOS CON VISUALIZADOR

SCHEMATIC DIAGRAM - SCHEMA DE PRINCIPE - SCHALTBILD - SCHEMA - ESQUEMA


KB
FCB
25U39120TA
GKF01
IK001
TMP47C416AF
BKJ08
S1
S2
S3
S4
C1
A
B
+5V
TO JSB
JOG & SHUTTLE
(FOR 98-1B)
ECOLOGY FEATURE
REC. LED FEATURE
*NOTE: RK117 & RL116 TIE TO GND WHEN NO REC FEATURE.
* VDD TO GND COUPLING CAPACITORS.
BK706
VIDEO
V.GND
AUDIO L(H/M)
A.GND
AUDIO R
NC
TO TMB
VIDEO GND
PK701 VIDEO-IN
PK702 AUDIO.L
PK703 AUDIO.R
PK404
CAMERA PAUSE
WK403
CAM_PAUSE
KDB_GND
PWM
TO KDB
PK801
MIC
PK802
HEADPHONE
MICDUB
FCBGND
TO HPB
WK802
MIC_DUB
FCBGND
PWM
A_HPL
FCBGND
A_HPR
TO TMB
WK806
BK014
+6VE
U5_32VE
UH-
UH+
GND
+5VD
KDB_CLOCK
SERVO_KDB_DATA
KDB_SERVO_DATA
KDB_STROBE
REMOTE
KDB_RESET
+14V
CAMERA-PAUSE
BK002
CAM.PAUSE
KDB_GND
* CL424 is a jumper for models w/o CAM. Pause.
KDB(L)
KDB(R)
WJ002
WJ003
JLG02
JLG03
VAL
ZK001 GP1U283R
ZK002 PIC-21144TE5
QK001 8MHZ
RK013 1M
GK923 LTL4221NLC
TK923 BC858B
GK117 LTL4221NLC
TK117 BC858B
(98-1B) CH+ SK002
REC SK004
STANDBY SK001
(98-1B) CH- SK003
STOP/EJECT SK008
(98-1B) FWD SK006
(98-1A) PLAY/PAUSE SK007
(98-1B) PLAY/PAUSE SK009
(98-1B) REW SK005
DK040 ZMM4.7
DJ040 ZMM2.7
DJ425 LL4148
DL091 (DEV)

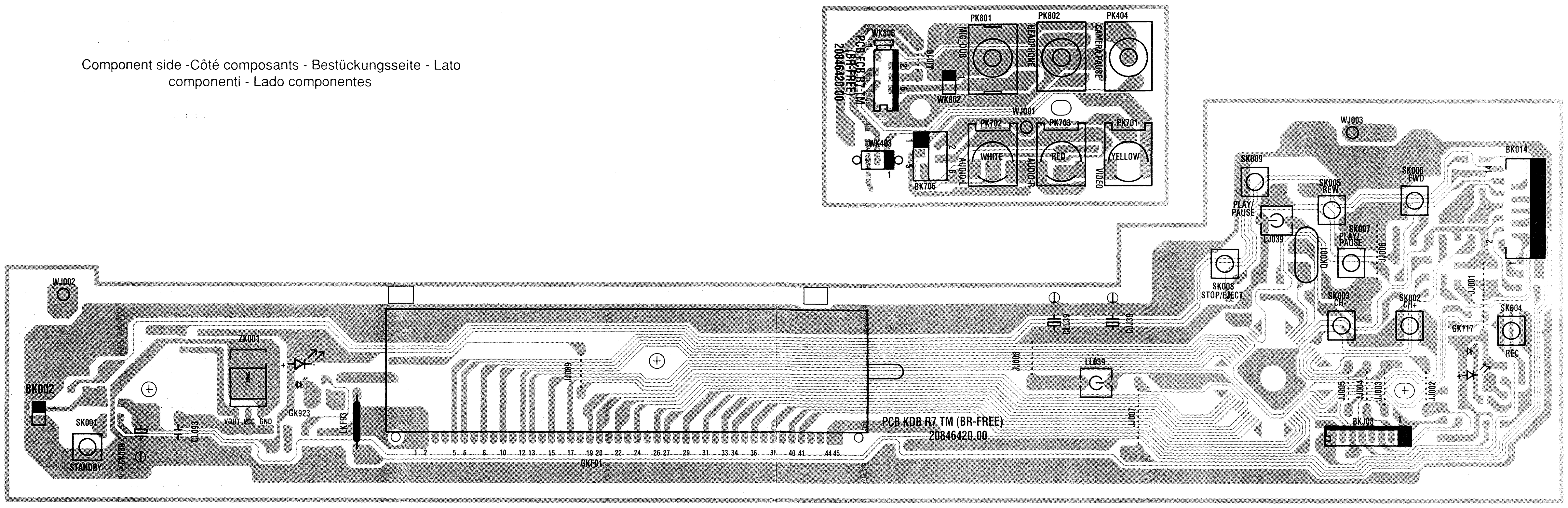
MIC/HEADPHONE

MODELS	PART	
	WK806	WK802
MIC ONLY	NO	YES
MIC & HP	YES	NO

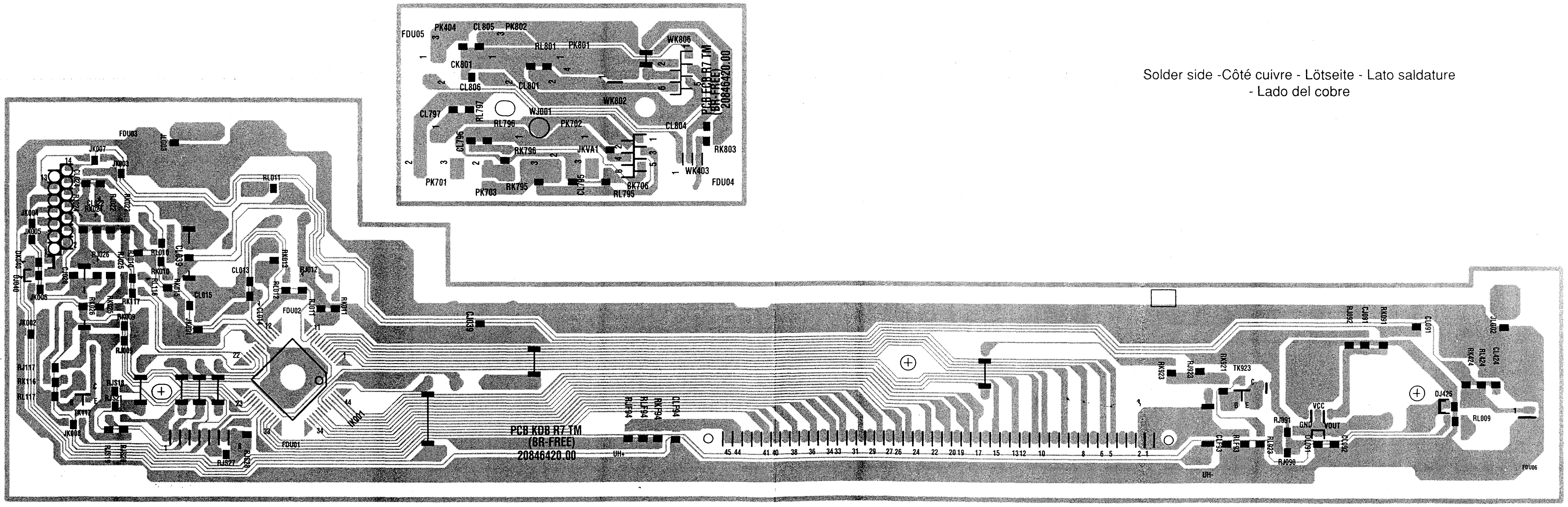
MODELS	PART	
	RL012	RJ012
SHU. & SW	3K	3K
JSB. & SW	0R	-
SW ONLY	-	3K

DESCRIPTION	ECO	REC	RKF94/RLF94	DJ040	JOG/SHUTTLE	CAM.P	MIC	HP	F.AV	TOOL
ASY KDB/FCB R6 TM2/TM2	YES	-	5R6	ZMM2.7	NO	YES	-	-	2	98-1A
ASY KDB/FCB/JSB R6 TM21/TM2/IL2	YES	-	5R6	ZMM2.7	YES	YES	-	-	2	98-1B
EQU KDB R6 TM1	YES	-	5R6	ZMM2.7	NO	NO	-	-	-	98-1A

KEYBOARD WITH DISPLAY - PLATINE DE COMMANDES AVEC AFFICHEUR - BEDIENTEIL MIT DISPLAY - TASTIERA CON DISPLAY - PLATINA MANDOS CON VISUALIZADOR


Component side -Côté composants - Bestückungsseite - Lato componenti - Lado componentes

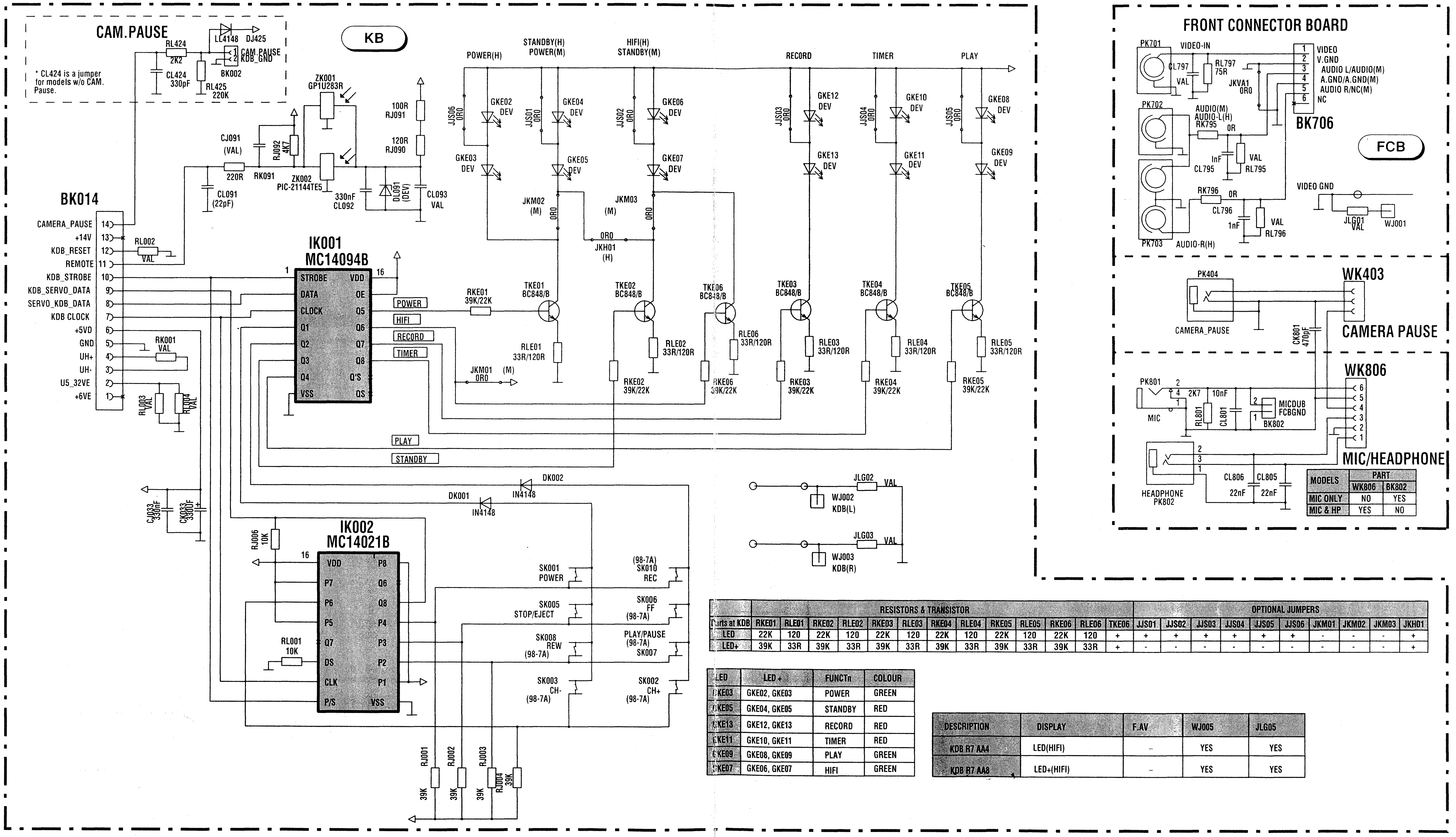
PCB FCB R7 TM (BR-FREE) 20846420.00
PK801
PK802
PK404
MIC DUB
HEADPHONE
CAMERA PAUSE
WK806
WK802
WJ001
WK403
BK706
PK702
PK703
PK701
WHITE
RED
YELLOW
AUDIO-L
AUDIO-R
VIDEO
WJ003
BK014
SK009
PLAY/ PAUSE
SK005 REW
SK006 FWD
SK007 PLAY/ PAUSE
SK008 STOP/EJECT
SK003 CH-
SK002 CH+
SK004
REC
GK117
LL039
BKJ08
WJ002
ZK001
BK002
SK001
STANDBY
GK923
VOUT VCC GND
LKF93
GKF01
PCB KDB R7 TM (BR-FREE) 20846420.00


Solder side -Côté cuivre - Lötseite - Lato saldature - Lado del cobre

FDU05
PK404
CL805
PK802
RL801
PK801
WK806
CK801
CL806
CL801
CL797
RL797
WJ001
WK802
RL796
PK702
CL804
CL796
RK796
JKVA1
RK803
PK701
PK703
RK795
CL795
BK706
RL795
WK403
FDU04
FDU03
FDU02
FDU01
FDU06
PCB KDB R7 TM (BR-FREE) 20846420.00
UH+
UH-
TK923
VCC
GND
VOUT
RL009
DJ425

KEYBOARD WITHOUT DISPLAY - PLATINE DE COMMANDES SANS AFFICHEUR - BEDIENTEIL OHNE DISPLAY - TASTIERA SENZA DISPLAY - PLATINA MANDOS SIN VISUALIZADOR

SCHEMATIC DIAGRAM - SCHEMA DE PRINCIPE - SCHALTBILD - SCHEMA - ESQUEMA


KB
CAM.PAUSE
LL4148 DJ425
RL424 2K2
CL424 330pF
RL425 220K
BK002
CAM.PAUSE
KDB_GND
* CL424 is a jumper for models w/o CAM. Pause.
ZK001 GP1U283R
ZK002 PIC-21144TE5
CJ091 (VAL)
RJ092 4K7
220R RK091
CL091 (22pF)
330nF CL092
DL091 (DEV)
CL093 VAL
100R RJ091
120R RJ090
BK014
CAMERA_PAUSE
+14V
KDB_RESET
REMOTE
KDB_STROBE
KDB_SERVO_DATA
SERVO_KDB_DATA
KDB CLOCK
+5VD
GND
UH+
UH-
U5_32VE
+6VE
RL002 VAL
RK001 VAL
RL003 VAL
RL004 VAL
CJ003 330nF
CK003 330nF
IK001
MC14094B
STROBE
DATA
CLOCK
Q1
Q2
Q3
Q4
VSS
VDD
OE
Q5
Q6
Q7
Q8
Q'S
QS
POWER
HIFI
RECORD
TIMER
PLAY
STANDBY
POWER(H)
STANDBY(H) POWER(M)
HIFI(H) STANDBY(M)
RECORD
TIMER
PLAY
JJS06 0R0
JJS01 0R0
JJS02 0R0
JJS03 0R0
JJS04 0R0
JJS05 0R0
GKE02 DEV
GKE03 DEV
GKE04 DEV
GKE05 DEV
GKE06 DEV
GKE07 DEV
GKE12 DEV
GKE13 DEV
GKE10 DEV
GKE11 DEV
GKE08 DEV
GKE09 DEV
JKM02 (M) 0R0
JKM03 (M) 0R0
JKH01 (H) 0R0
JKM01 (M) 0R0
RKE01 39K/22K
TKE01 BC848/B
TKE02 BC848/B
TKE06 BC848/B
TKE03 BC848/B
TKE04 BC848/B
TKE05 BC848/B
RLE01 33R/120R
RLE02 33R/120R
RLE06 33R/120R
RLE03 33R/120R
RLE04 33R/120R
RLE05 33R/120R
RKE02 39K/22K
RKE06 39K/22K
RKE03 39K/22K
RKE04 39K/22K
RKE05 39K/22K
DK002 IN4148
DK001 IN4148
IK002
MC14021B
VDD
P7
P6
P5
Q7
DS
CLK
P/S
P8
Q6
Q8
P4
P3
P2
P1
VSS
RJ006 10K
RL001 10K
SK001 POWER
SK005 STOP/EJECT
SK008 REW (98-7A)
SK003 CH- (98-7A)
(98-7A) SK010 REC
SK006 FF (98-7A)
PLAY/PAUSE (98-7A) SK007
SK002 CH+ (98-7A)
RJ001 39K
RJ002 39K
RJ003 39K
RJ004 39K
JLG02 VAL
WJ002 KDB(L)
JLG03 VAL
WJ003 KDB(R)
FRONT CONNECTOR BOARD
FCB
PK701 VIDEO-IN
CL797 VAL
RL797 75R
JKVA1 0R0
PK702
AUDIO(M) AUDIO-L(H)
RK795 0R
InF CL795
VAL RL795
RK796 0R
CL796 1nF
VAL RL796
PK703 AUDIO-R(H)
BK706
1 VIDEO
2 V.GND
3 AUDIO L/AUDIO(M)
4 A.GND/A.GND(M)
5 AUDIO R/NC(M)
6 NC
VIDEO GND
JLG01 VAL
WJ001
PK404
CAMERA_PAUSE
CK801 470pF
WK403
CAMERA PAUSE
WK806
PK801
MIC
2K7
10nF
RL801
CL801
MICDUB FCBGND
BK802
MIC/HEADPHONE
HEADPHONE PK802
CL806 22nF
CL805 22nF

MODELS	PART WK806	BK802
MIC ONLY	NO	YES
MIC & HP	YES	NO

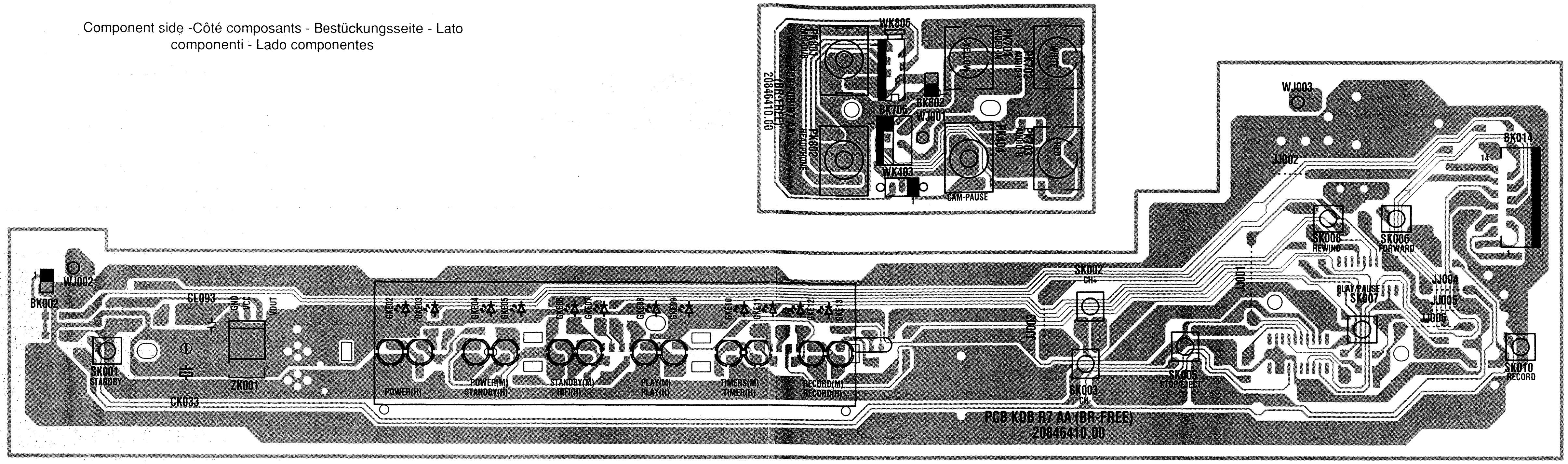
	RESISTORS & TRANSISTOR													OPTIONAL JUMPERS									
rts at KDB	RKE01	RLE01	RKE02	RLE02	RKE03	RLE03	RKE04	RLE04	RKE05	RLE05	RKE06	RLE06	TKE06	JJS01	JJS02	JJS03	JJS04	JJS05	JJS06	JKM01	JKM02	JKM03	JKH01
LED	22K	120	22K	120	22K	120	22K	120	22K	120	22K	120	+	+	+	+	+	+	+	-	-	-	+
LED+	39K	33R	39K	33R	39K	33R	39K	33R	39K	33R	39K	33R	+	-	-	-	-	-	-	-	-	-	+

LED	LED +	FUNCTn	COLOUR
KE03	GKE02, GKE03	POWER	GREEN
KE05	GKE04, GKE05	STANDBY	RED
KE13	GKE12, GKE13	RECORD	RED
KE11	GKE10, GKE11	TIMER	RED
KE09	GKE08, GKE09	PLAY	GREEN
KE07	GKE06, GKE07	HIFI	GREEN

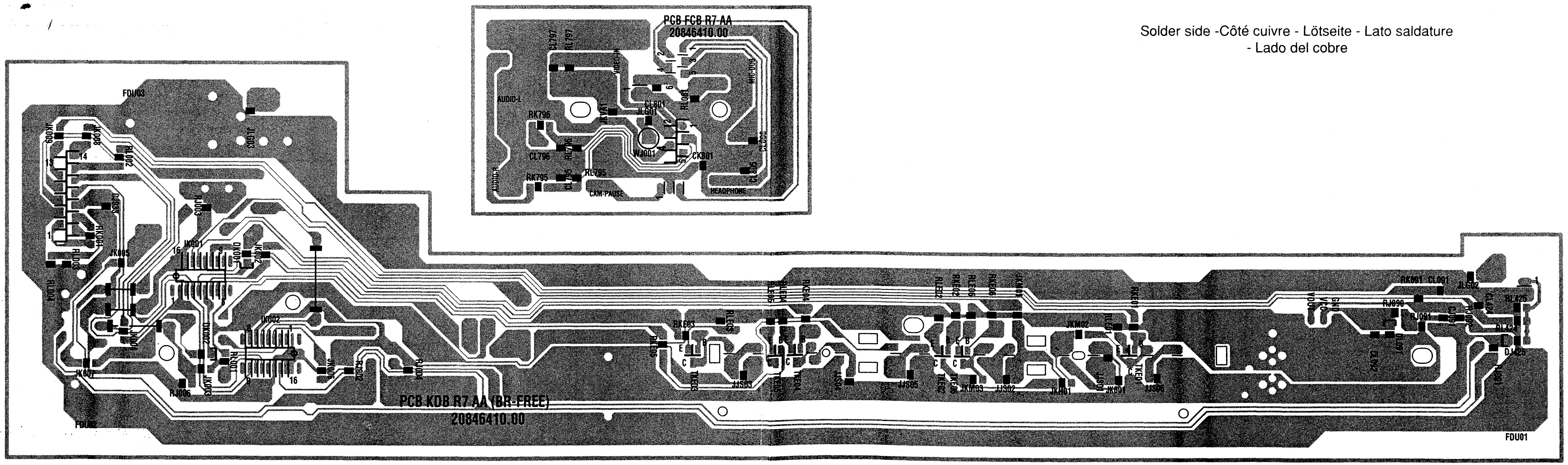
DESCRIPTION	DISPLAY	F.AV	WJ005	JLG05
KDB R7 AA4	LED(HIFI)	–	YES	YES
KDB R7 AA8	LED+(HIFI)	–	YES	YES

KEYBOARD WITHOUT DISPLAY - PLATINE DE COMMANDES SANS AFFICHEUR - BEDIENTEIL OHNE DISPLAY - TASTIERA SENZA DISPLAY - PLATINA MANDOS SIN VISUALIZADOR

Component side -Côté composants - Bestückungsseite - Lato componenti - Lado componentes

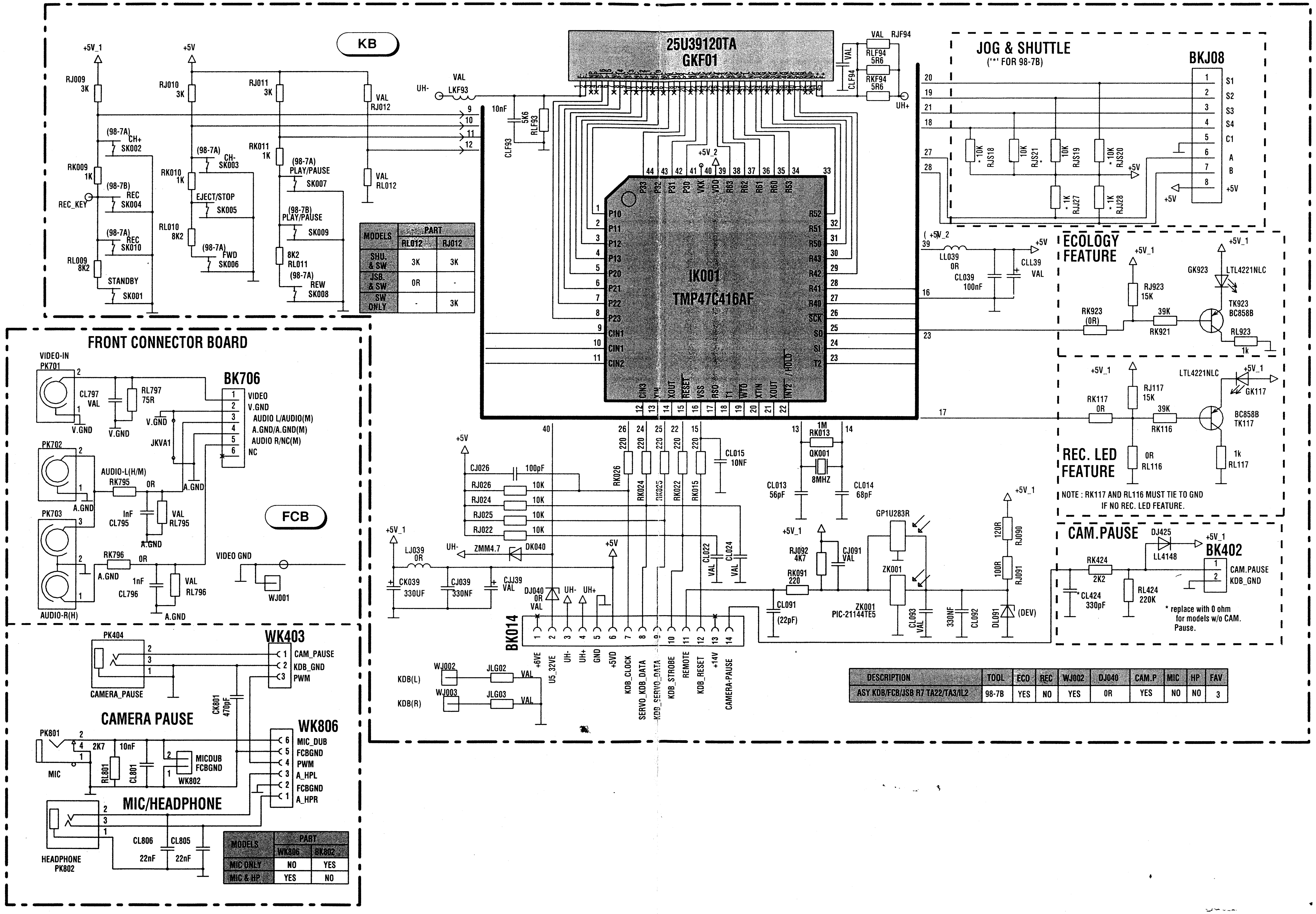

WK806
PK802
BK706
BK802
WJ001
WK403
CAM-PAUSE
20846410.00
WJ003
BK014
14
JJ002
JJ001
SK008
REWIND
SK006
FORWARD
JJ004
JJ005
JJ006
SK007
PLAY/PAUSE
SK002
CH+
SK003
CH-
SK005
STOP/EJECT
SK010
RECORD
WJ002
BK002
CL093
SK001
STANDBY
ZK001
CK033
POWER(H)
POWER(M)
STANDBY(H)
STANDBY(M)
HIFI(H)
PLAY(M)
PLAY(H)
TIMERS(M)
TIMER(H)
RECORD(M)
RECORD(H)
PCB KDB R7 AA (BR-FREE)
20846410.00

Solder side -Côté cuivre - Lötseite - Lato saldature - Lado del cobre


PCB FCB R7 AA
20846410.00
AUDIO-L
RK796
CL796
RK795
RL795
CAM-PAUSE
HEADPHONE
CK801
FDU03
FDU02
FDU01
14
16
IK001
IK002
RK061
CL001
PCB KDB R7 AA (BR-FREE)
20846410.00

KEYBOARD WITH DISPLAY - PLATINE DE COMMANDES AVEC AFFICHEUR - BEDIENTEIL MIT DISPLAY - TASTIERA CON DISPLAY - PLATINA MANDOS CON VISUALIZADOR

SCHEMATIC DIAGRAM - SCHEMA DE PRINCIPE - SCHALTBILD - SCHEMA - ESQUEMA


KB
25U39120TA
GKF01
IK001
TMP47C416AF
JOG & SHUTTLE
("*" FOR 98-7B)
BKJ08
ECOLOGY FEATURE
REC. LED FEATURE
NOTE : RK117 AND RL116 MUST TIE TO GND IF NO REC. LED FEATURE.
CAM.PAUSE
BK402
* replace with 0 ohm for models w/o CAM. Pause.
FRONT CONNECTOR BOARD
BK706
FCB
WK403
CAMERA PAUSE
WK806
MIC/HEADPHONE
BK014
GP1U283R
ZK001
PIC-21144TE5
QK001
8MHZ
STANDBY
CH+
CH-
REC
EJECT/STOP
PLAY/PAUSE
FWD
REW
VIDEO-IN
AUDIO-R(H)
AUDIO-L(H/M)
VIDEO GND
CAMERA_PAUSE
MIC
HEADPHONE
PK802
+6VE
U5_32VE
UH-
UH+
GND
+5VD
KDB_CLOCK
SERVO_KDB_DATA
KDB_SERVO_DATA
KDB_STROBE
REMOTE
KDB_RESET
+14V
CAMERA-PAUSE
KDB(L)
KDB(R)

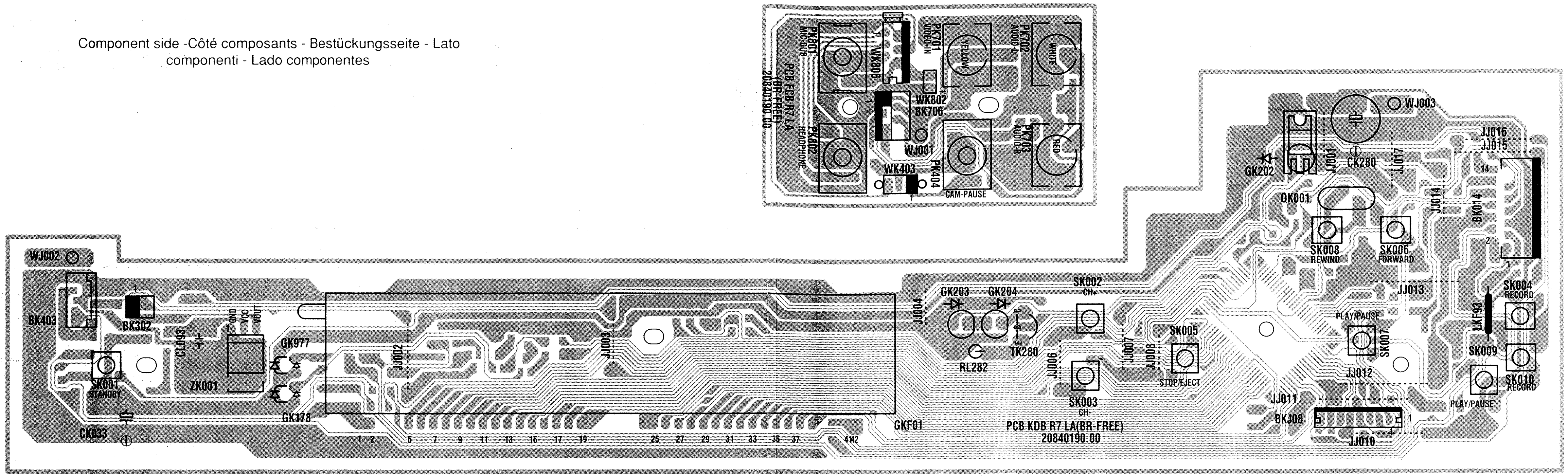
MODELS	PART	
	RL012	RJ012
SHU. & SW	3K	3K
JSB. & SW	0R	-
SW ONLY	-	3K

MODELS	PART	
	WK806	BK802
MIC ONLY	NO	YES
MIC & HP	YES	NO

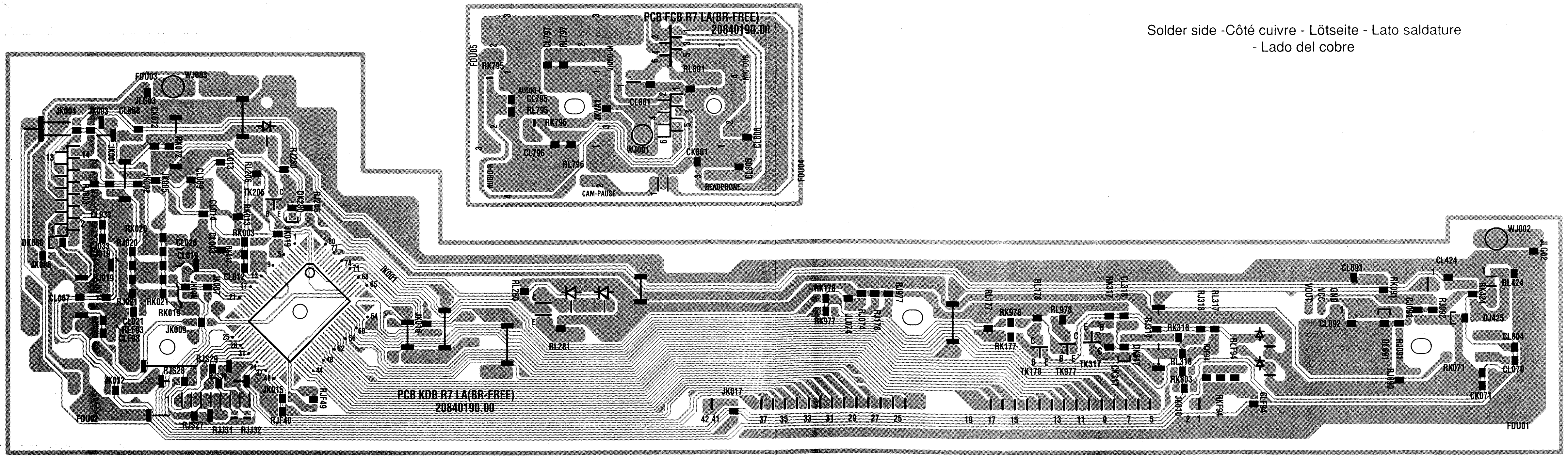
DESCRIPTION	TOOL	ECO	REC	WJ002	DJ040	CAM.P	MIC	HP	FAV
ASY KDB/FCB/JSB R7 TA22/TA3/IL2	98-7B	YES	NO	YES	0R	YES	NO	NO	3

KEYBOARD WITH DISPLAY - PLATINE DE COMMANDES AVEC AFFICHEUR - BEDIENTEIL MIT DISPLAY - TASTIERA CON DISPLAY - PLATINA MANDOS CON VISUALIZADOR

Component side -Côté composants - Bestückungsseite - Lato componenti - Lado componentes

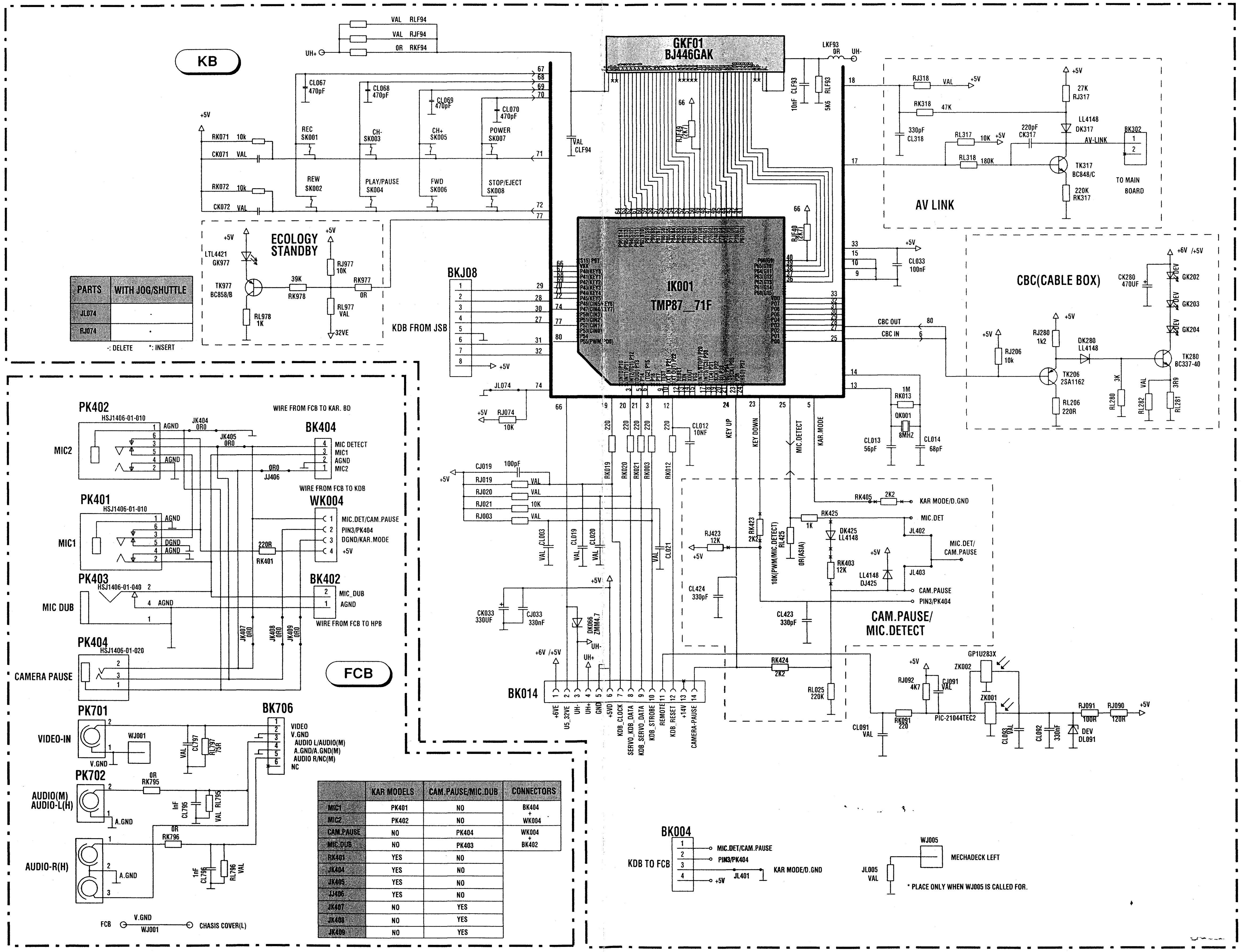

PCB FCB R7 LA
(BR-FREE)
20840190.00
PK801
MIC-DUB
PK802
HEADPHONE
WK806
PK701
VIDEO-IN
YELLOW
PK702
AUDIO-L
WHITE
WK802
BK706
WJ001
PK703
AUDIO-R
RED
WK403
PK404
CAM-PAUSE
WJ003
JJ016
JJ015
GK202
JJ001
CK280
JJ017
QK001
JJ014
BK014
SK008
REWIND
SK006
FORWARD
JJ013
SK004
RECORD
WJ002
BK403
BK302
CL093
GK977
ZK001
SK001
STANDBY
GK178
CK033
JJ002
JJ003
JJ004
GK203
GK204
RL282
TK280
SK002
CH+
JJ006
JJ007
JJ008
SK005
STOP/EJECT
SK003
CH-
PLAY/PAUSE
SK007
JJ012
LKF93
SK009
SK010
RECORD
PLAY/PAUSE
JJ011
BKJ08
JJ010
GKF01
PCB KDB R7 LA(BR-FREE)
20840190.00

Solder side -Côté cuivre - Lötseite - Lato saldature - Lado del cobre


PCB FCB R7 LA(BR-FREE)
20840190.00
FDU05
RK795
RL797
RL801
AUDIO-L
CL795
RL795
RK796
CL801
CL796
RL796
WJ001
CK801
CAM-PAUSE
HEADPHONE
FDU04
FDU03
WJ003
JK004
JK003
CL068
JLG93
RK020
TK206
CL020
CL019
RK019
JK809
RJS28
RJS29
JK012
FDU02
RJS27
RJJ31
RJJ32
RJF49
JK001
PCB KDB R7 LA(BR-FREE)
20840190.00
RL280
RL281
RK178
RK977
JK017
RK978
RL978
RK177
TK178
TK977
TK317
RK318
RL318
RK303
CL091
CL092
WJ002
CL424
RL424
DJ425
CL804
CL070
CK071
RK071
FDU01

KEYBOARD WITH DISPLAY - PLATINE DE COMMANDES AVEC AFFICHEUR - BEDIENTEIL MIT DISPLAY - TASTIERA CON DISPLAY - PLATINA MANDOS CON VISUALIZADOR

SCHEMATIC DIAGRAM - SCHEMA DE PRINCIPE - SCHALTBILD - SCHEMA - ESQUEMA


KB
FCB
GKF01
BJ446GAK
1K001
TMP87__71F
ECOLOGY STANDBY
AV LINK
CBC(CABLE BOX)
CAM.PAUSE/ MIC.DETECT
BKJ08
KDB FROM JSB
BK014
BK004
KDB TO FCB
PK402
PK401
PK403
PK404
PK701
PK702
BK404
WK004
BK402
BK706
MIC2
MIC1
MIC DUB
CAMERA PAUSE
VIDEO-IN
AUDIO(M) AUDIO-L(H)
AUDIO-R(H)
WIRE FROM FCB TO KAR. BD
WIRE FROM FCB TO KDB
WIRE FROM FCB TO HPB
REC SK001
CH- SK003
CH+ SK005
POWER SK007
REW SK002
PLAY/PAUSE SK004
FWD SK006
STOP/EJECT SK008
TO MAIN BOARD
MECHADECK LEFT
* PLACE ONLY WHEN WJ005 IS CALLED FOR.
CHASIS COVER(L)

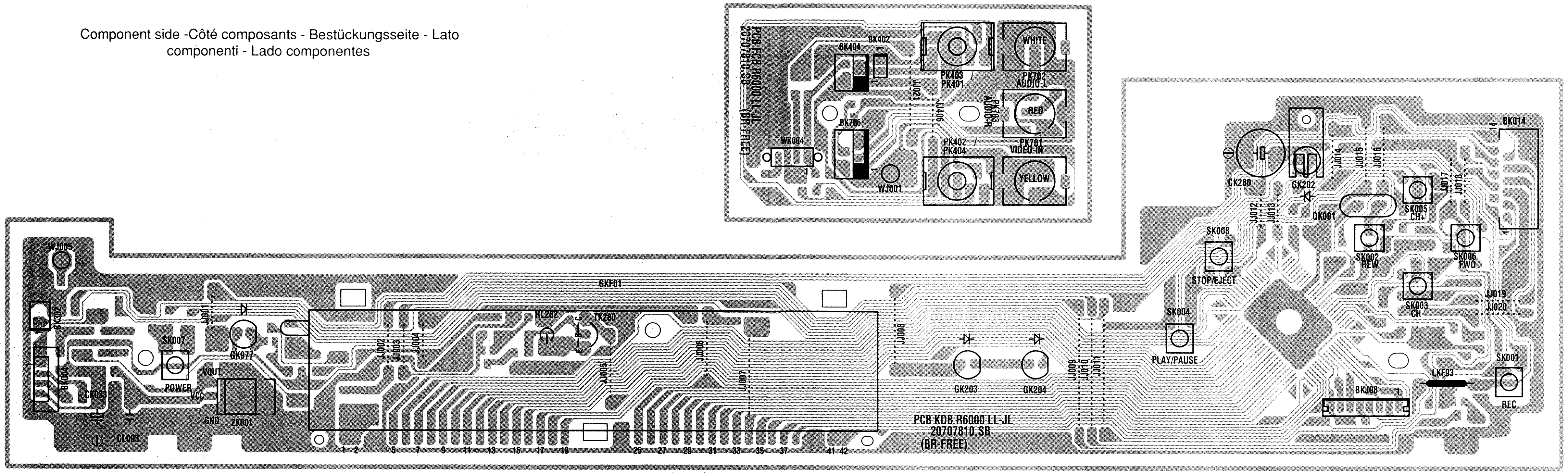
PARTS	WITH JOG/SHUTTLE
JL074	-
RJ074	*

-: DELETE *: INSERT

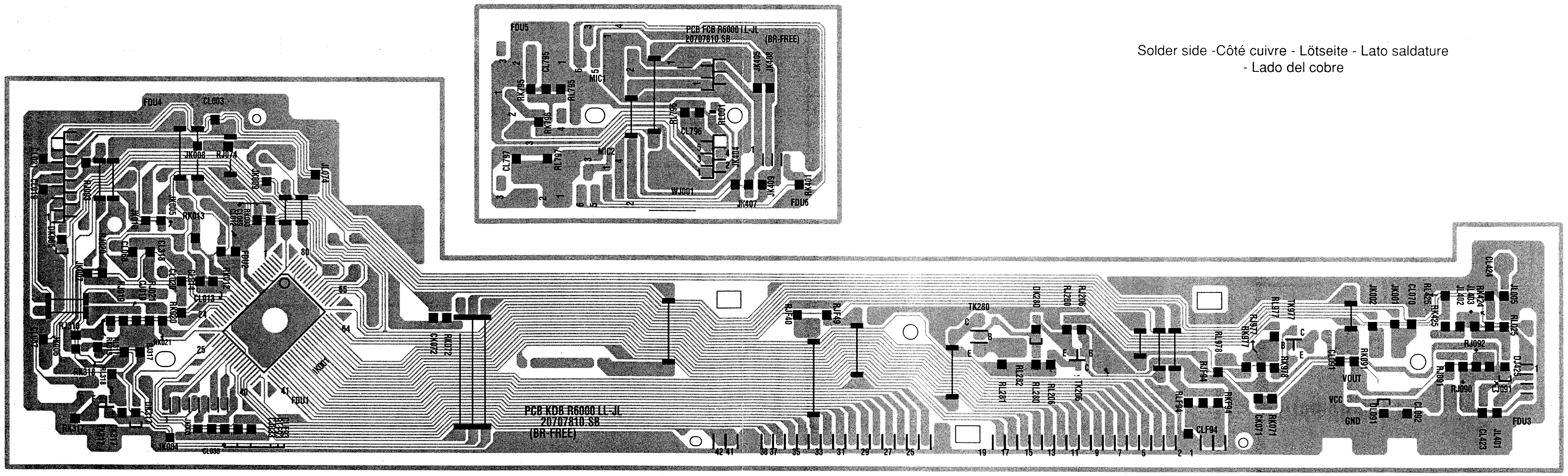
	KAR MODELS	CAM.PAUSE/MIC.DUB	CONNECTORS
MIC1	PK401	NO	BK404 + WK004
MIC2	PK402	NO	
CAM.PAUSE	NO	PK404	WK004 + BK402
MIC.DUB	NO	PK403	
RK401	YES	NO	
JK404	YES	NO	
JK405	YES	NO	
JJ406	YES	NO	
JK407	NO	YES	
JK408	NO	YES	
JK409	NO	YES	

KEYBOARD WITH DISPLAY - PLATINE DE COMMANDES AVEC AFFICHEUR - BEDIENTEIL MIT DISPLAY - TASTIERA CON DISPLAY - PLATINA MANDOS CON VISUALIZADOR

Component side -Côté composants - Bestückungsseite - Lato componenti - Lado componentes

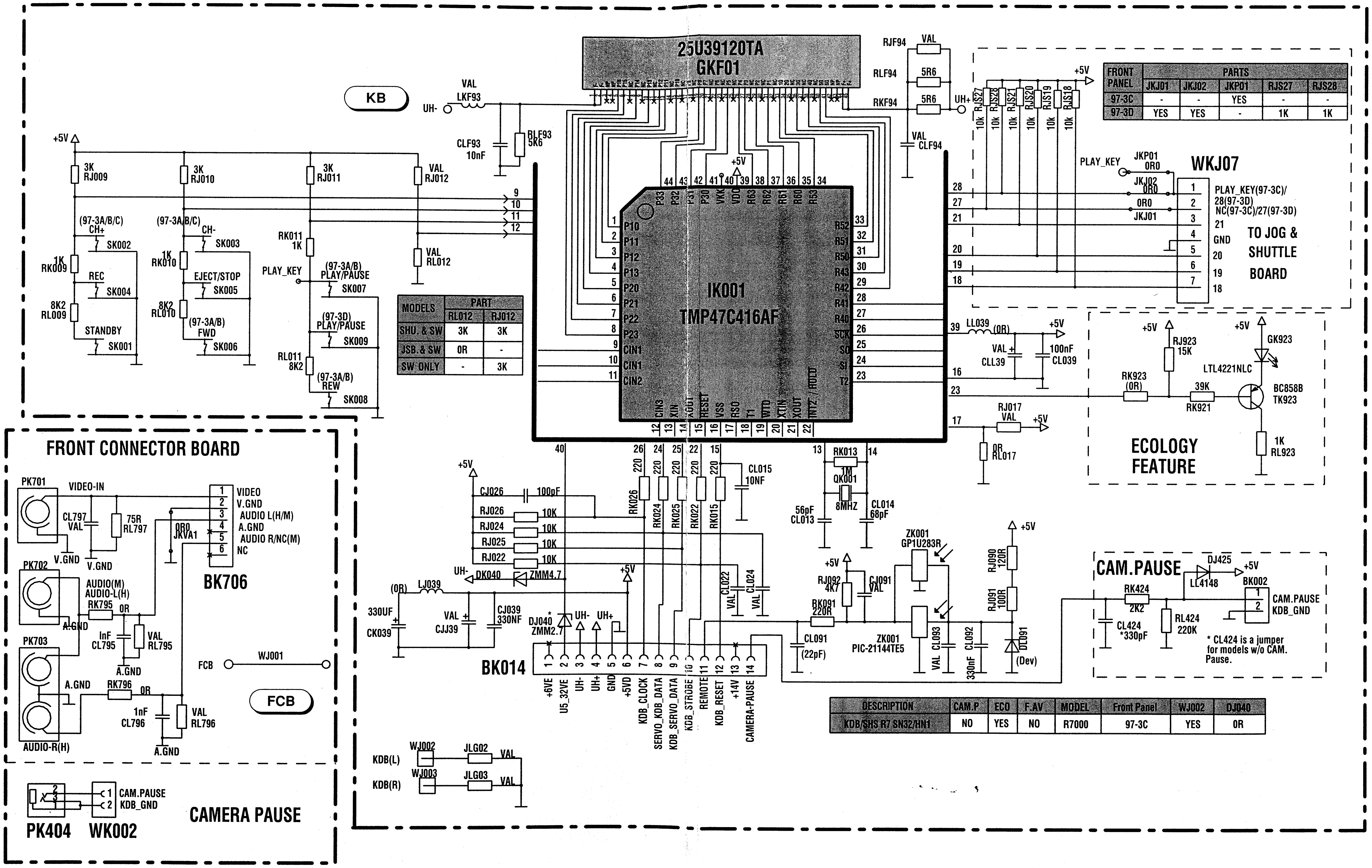

PCB FCB R6000 LL-JL
20707810.SB
(BR-FREE)
BK402
BK404
PK403
PK401
WHITE
PK702
AUDIO-L
AUDIO-R
RED
BK706
WK004
PK402
PK404
PK701
VIDEO-IN
YELLOW
WJ001
BK014
CK280
GK202
QK001
SK005
CH+
SK008
STOP/EJECT
SK002
REW
SK006
FWD
SK003
CH-
SK004
PLAY/PAUSE
SK001
REC
LKF93
BK108
WJ005
SK007
POWER
GK977
VOUT
VCC
GND
ZK001
CK033
CL093
GKF01
RL282
TK280
GK203
GK204
PCB KDB R6000 LL-JL
20707810.SB
(BR-FREE)

Solder side -Côté cuivre - Lötseite - Lato saldature - Lado del cobre


FDU5
PCB FCB R6000 LL-JL
20707810.SB
(BR-FREE)
CL795
RL795
MIC1
MIC2
CL796
CL797
RL797
WJ001
JK407
FDU6
FDU4
CL603
JK008
RJ074
RK013
FDU1
TK280
VOUT
VCC
GND
CLF94
FDU3
PCB KDB R6000 LL-JL
20707810.SB
(BR-FREE)

KEYBOARD WITH DISPLAY - PLATINE DE COMMANDES AVEC AFFICHEUR - BEDIENTEIL MIT DISPLAY - TASTIERA CON DISPLAY - PLATINA MANDOS CON VISUALIZADOR

SCHEMATIC DIAGRAM - SCHEMA DE PRINCIPE - SCHALTBILD - SCHEMA - ESQUEMA



25U39120TA
GKF01
KB
IK001
TMP47C416AF
WKJ07
TO JOG & SHUTTLE BOARD
PLAY_KEY(97-3C)/28(97-3D)
NC(97-3C)/27(97-3D)
ECOLOGY FEATURE
LTL4221NLC
GK923
BC858B
TK923
CAM.PAUSE
DJ425
LL4148
BK002
CAM.PAUSE
KDB_GND
* CL424 is a jumper for models w/o CAM. Pause.
FRONT CONNECTOR BOARD
PK701
VIDEO-IN
PK702
PK703
AUDIO-R(H)
BK706
VIDEO
V.GND
AUDIO L(H/M)
A.GND
AUDIO R/NC(M)
NC
FCB
WJ001
CAMERA PAUSE
PK404
WK002
BK014
+6VE
U5_32VE
UH-
UH+
GND
+5VD
KDB_CLOCK
SERVO_KDB_DATA
KDB_SERVO_DATA
KDB_STROBE
REMOTE
KDB_RESET
+14V
CAMERA-PAUSE
ZK001
GP1U283R
PIC-21144TE5
QK001
8MHZ
REC
STANDBY
EJECT/STOP
FWD
PLAY/PAUSE
REW
CH+
CH-
PLAY_KEY
KDB(L)
KDB(R)
WJ002
WJ003
JLG02
JLG03

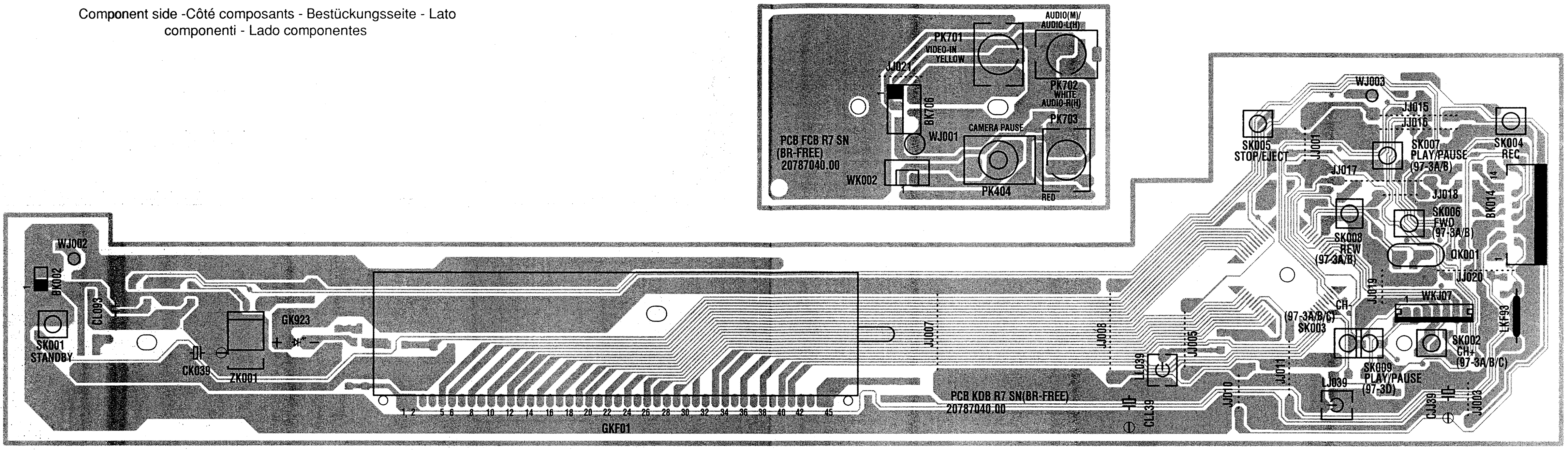
MODELS	PART	
	RL012	RJ012
SHU. & SW	3K	3K
JSB. & SW	0R	-
SW ONLY	-	3K

FRONT PANEL	PARTS				
	JKJ01	JKJ02	JKP01	RJS27	RJS28
97-3C	-	-	YES	-	-
97-3D	YES	YES	-	1K	1K

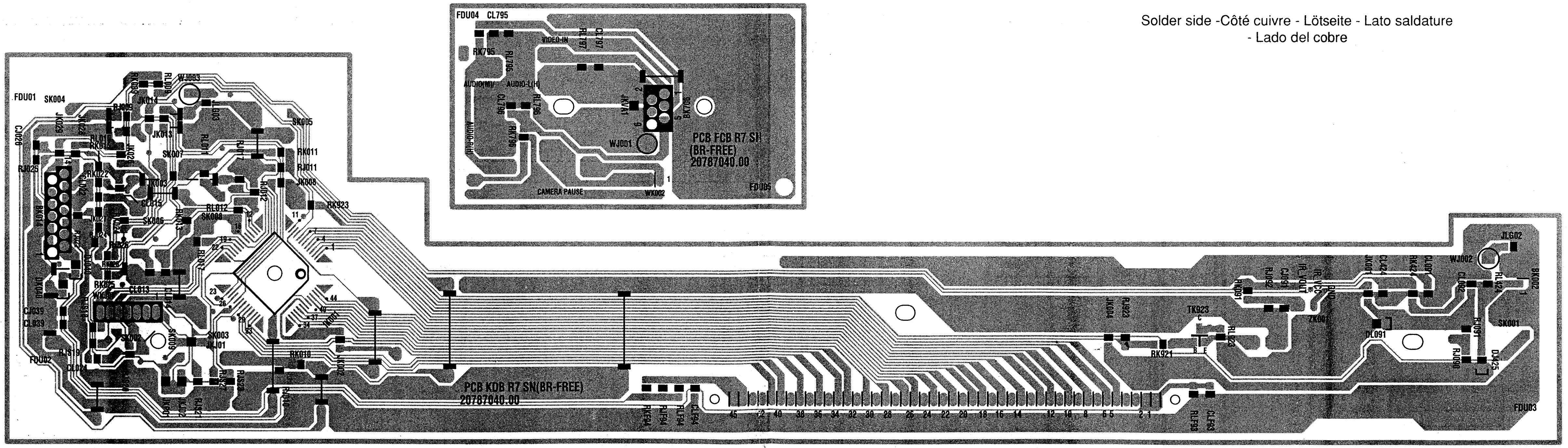
DESCRIPTION	CAM.P	ECO	F.AV	MODEL	Front Panel	WJ002	DJ040
KDB/SHS R7 SN32/HN1	NO	YES	NO	R7000	97-3C	YES	0R

KEYBOARD WITH DISPLAY - PLATINE DE COMMANDES AVEC AFFICHEUR - BEDIENTEIL MIT DISPLAY - TASTIERA CON DISPLAY - PLATINA MANDOS CON VISUALIZADOR

Component side -Côté composants - Bestückungsseite - Lato componenti - Lado componentes

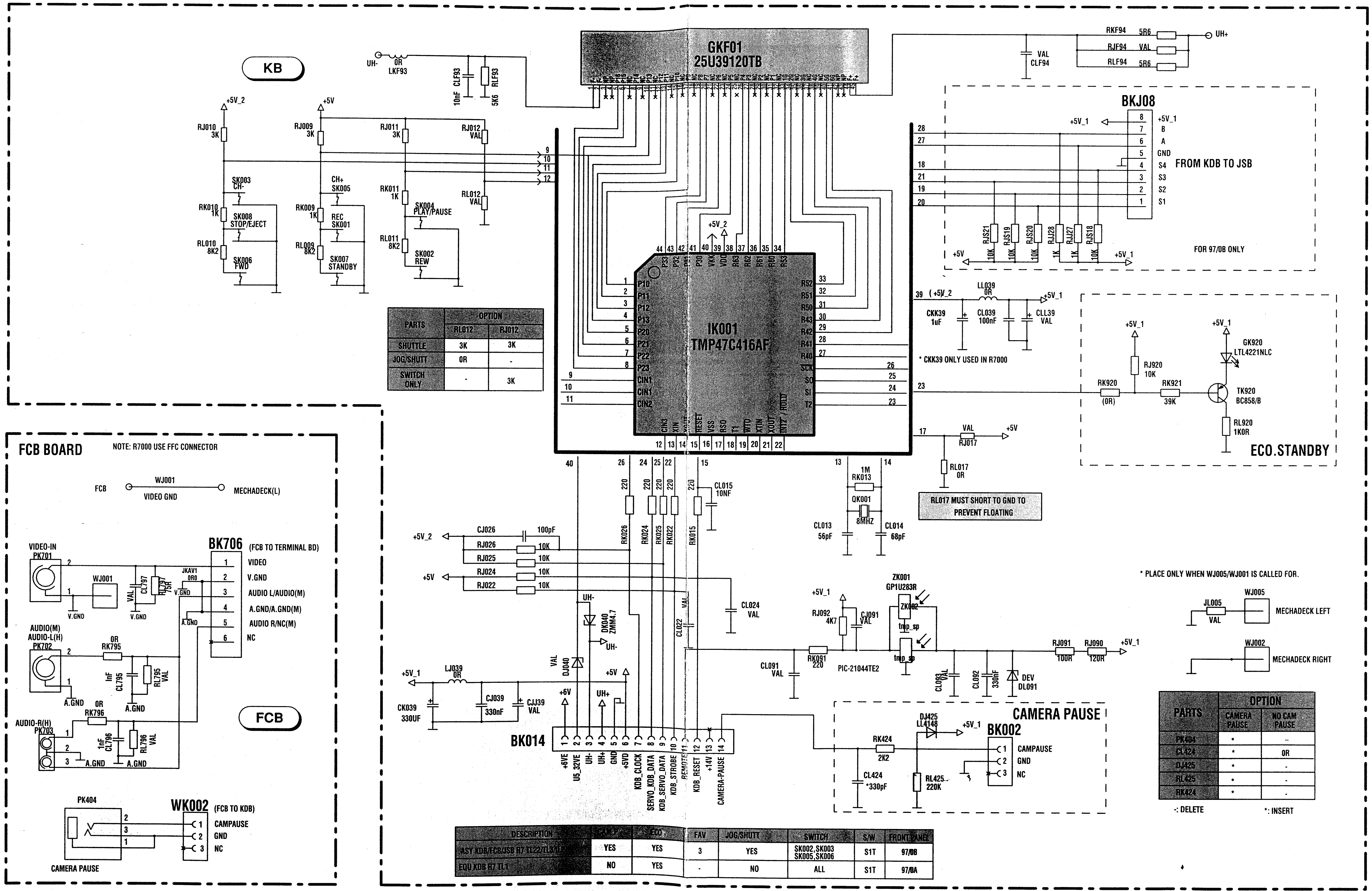

AUDIO(M)/ AUDIO-L(H)
PK701
VIDEO-IN YELLOW
LJ021
PK702 WHITE AUDIO-R(H)
BK706
WJ001
CAMERA PAUSE
PK703
PCB FCB R7 SN (BR-FREE) 20787040.00
WK002
PK404
RED
WJ003
JJ015
JJ016
SK005 STOP/EJECT
SK007 PLAY/PAUSE (97-3A/B)
SK004 REC
JJ017
JJ018
SK006 FWD (97-3A/B)
SK008 REW (97-3A/B)
BK014
QK001
JJ020
WKJ07
LKF93
CH- (97-3A/B/C) SK003
SK002 CH+ (97-3A/B/C)
SK009 PLAY/PAUSE (97-3D)
LJ039
CJ039
JJ003
JJ010
JJ011
CTL39
LJ039
JJ005
JJ008
JJ007
PCB KDB R7 SN(BR-FREE) 20787040.00
WJ002
BK002
CL093
SK001 STANDBY
CK039
GK923
ZK001
GKF01
1 2 5 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 45

Solder side -Côté cuivre - Lötseite - Lato saldature - Lado del cobre


FDU04
CL795
RK795
VIDEO-IN
AUDIO(M)
AUDIO-L(H)
PCB FCB R7 SN (BR-FREE) 20787040.00
WJ001
CAMERA PAUSE
WK002
FDU05
FDU01
SK004
WJ003
SK005
RK011
RJ011
SK007
SK006
RK923
SK003
RK018
FDU02
CJ039
CL923
PCB KDB R7 SN(BR-FREE) 20787040.00
TK923
RK921
ZK001
DL091
WJ002
SK001
FDU03
45 42 40 38 36 34 32 30 28 26 24 22 20 18 16 14 12 10 8 6 5 2 1

KEYBOARD WITH DISPLAY - PLATINE DE COMMANDES AVEC AFFICHEUR - BEDIENTEIL MIT DISPLAY - TASTIERA CON DISPLAY - PLATINA MANDOS CON VISUALIZADOR

SCHEMATIC DIAGRAM - SCHEMA DE PRINCIPE - SCHALTBILD - SCHEMA - ESQUEMA


KB
GKF01
25U39120TB
IK001
TMP47C416AF
UH-
0R
LKF93
10nF CLF93
RLF93 5K6
RKF94 5R6
RJF94 VAL
RLF94 5R6
VAL CLF94
UH+
+5V_2
+5V
RJ010 3K
RJ009 3K
RJ011 3K
RJ012 VAL
SK003 CH-
CH+ SK005
RK010 1K
SK008 STOP/EJECT
RK009 1K
REC SK001
RK011 1K
SK004 PLAY/PAUSE
RL012 VAL
RL010 8K2
SK006 FWD
RL009 8K2
SK007 STANDBY
RL011 8K2
SK002 REW
BKJ08
+5V_1
B
A
GND
S4
S3
S2
S1
FROM KDB TO JSB
RJS21 10K
RJS19 10K
RJS20 10K
RJJ28 1K
RJJ27 1K
RJS18 10K
FOR 97/0B ONLY
39 (+5V_2
LL039 0R
CKK39 1uF
CL039 100nF
CLL39 VAL
* CKK39 ONLY USED IN R7000
RK920 (0R)
RJ920 10K
RK921 39K
GK920 LTL4221NLC
TK920 BC858/B
RL920 1K0R
ECO.STANDBY
VAL RJ017
RL017 0R
RL017 MUST SHORT TO GND TO PREVENT FLOATING
1M RK013
QK001 8MHZ
CL013 56pF
CL014 68pF
CL015 10NF
RK026
RK024
RK025
RK022
RK015
220
CJ026 100pF
RJ026 10K
RJ025 10K
RJ024 10K
RJ022 10K
CL024 VAL
CL022
DK040 ZMM4.7
DJ040 VAL
UH+
+6V
LJ039 0R
CK039 330UF
CJ039 330nF
CJJ39 VAL
BK014
+6VE
U5_32VE
GND
+5VD
KDB_CLOCK
SERVO_KDB_DATA
KDB_SERVO_DATA
KDB_STROBE
REMOTE
KDB_RESET
+14V
CAMERA-PAUSE
ZK001 GP1U283R
ZK002
tmp_sp
RJ092 4K7
CJ091 VAL
RK091 220
PIC-21044TE2
CL091 VAL
RJ091 100R
RJ090 120R
CL093 VAL
CL092 330nF
DEV DL091
* PLACE ONLY WHEN WJ005/WJ001 IS CALLED FOR.
WJ005
JL005 VAL
MECHADECK LEFT
WJ002
MECHADECK RIGHT
CAMERA PAUSE
DJ425 LL4148
RK424 2K2
CL424 *330pF
RL425 220K
BK002
CAMPAUSE
NC
FCB BOARD
NOTE: R7000 USE FFC CONNECTOR
WJ001
FCB
VIDEO GND
MECHADECK(L)
VIDEO-IN PK701
V.GND
CL797
RL797 75R
JKAV1 0R0
BK706 (FCB TO TERMINAL BD)
VIDEO
AUDIO L/AUDIO(M)
A.GND/A.GND(M)
AUDIO R/NC(M)
AUDIO(M) AUDIO-L(H) PK702
0R RK795
1nF CL795
RL795 VAL
A.GND
FCB
AUDIO-R(H) PK703
0R RK796
1nF CL796
RL796 VAL
PK404
WK002 (FCB TO KDB)
CAMERA PAUSE

PARTS	OPTION	
	RL012	RJ012
SHUTTLE	3K	3K
JOG/SHUTT	0R	-
SWITCH ONLY	-	3K

PARTS	OPTION	
	CAMERA PAUSE	NO CAM PAUSE
PK404	*	–
CL424	*	0R
DJ425	*	-
RL425	*	-
RK424	*	-

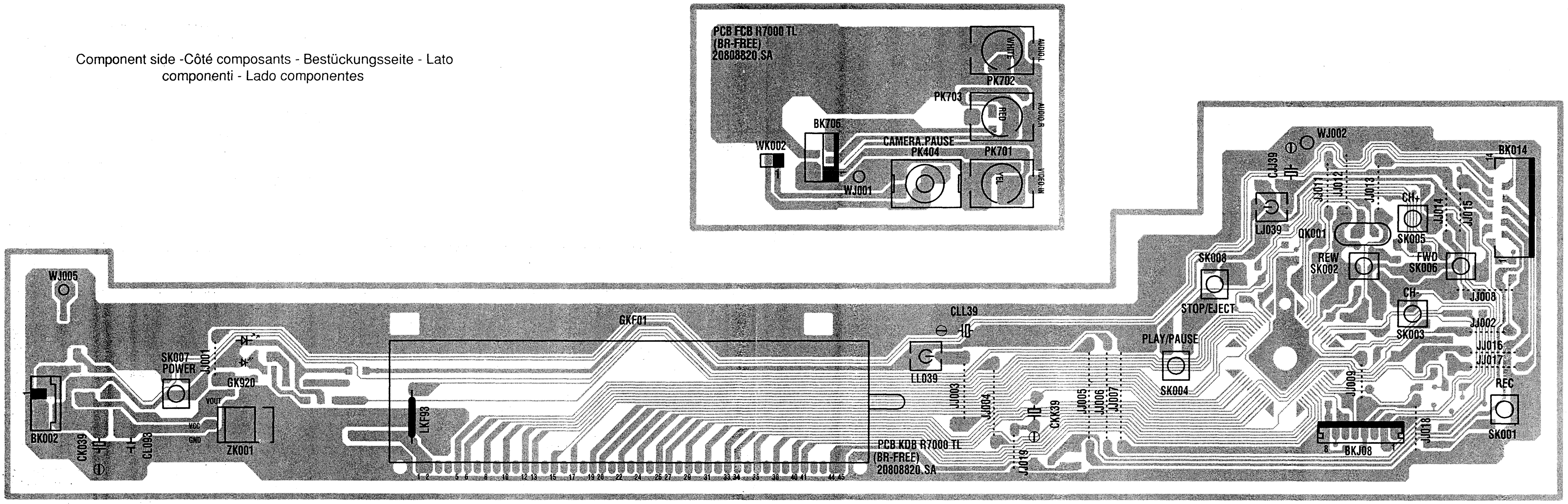
-: DELETE

*: INSERT

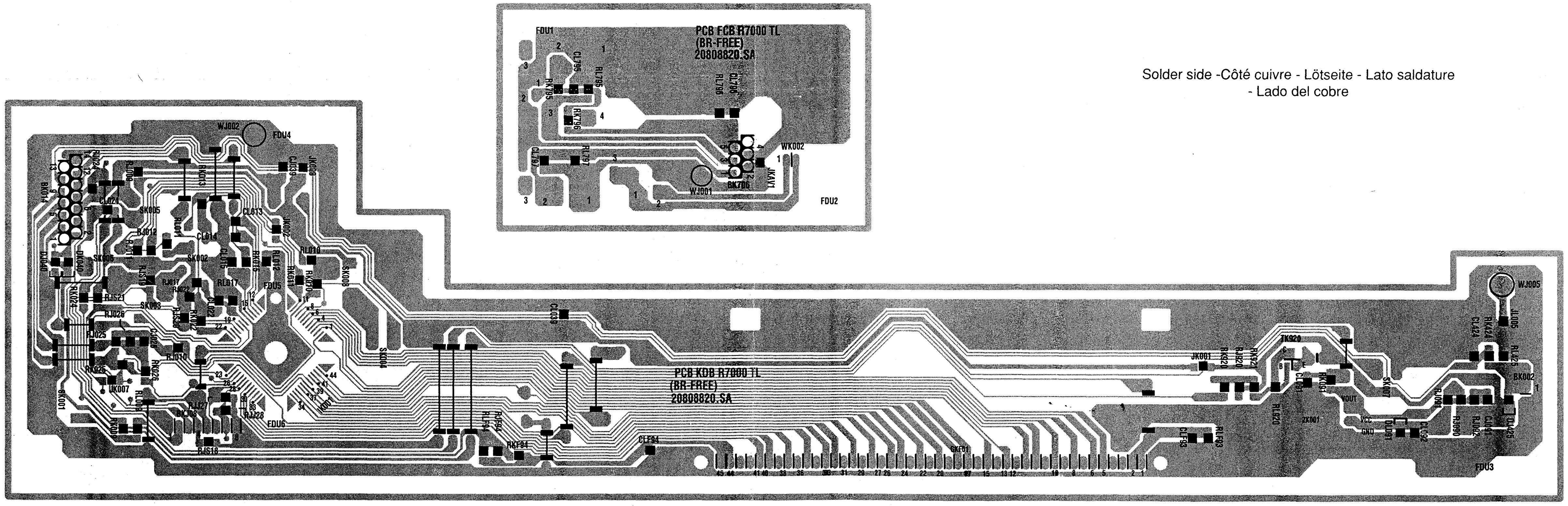
DESCRIPTION	CAM.P	ECO	FAV	JOG/SHUTT	SWITCH	S/W	FRONT PANEL
ASY KDB/FCB/JSB R7 TL22/TL3/TL2	YES	YES	3	YES	SK002,SK003 SK005,SK006	S1T	97/0B
EQU KDB R7 TL1	NO	YES	-	NO	ALL	S1T	97/0A

KEYBOARD WITH DISPLAY - PLATINE DE COMMANDES AVEC AFFICHEUR - BEDIENTEIL MIT DISPLAY - TASTIERA CON DISPLAY - PLATINA MANDOS CON VISUALIZADOR

Component side -Côté composants - Bestückungsseite - Lato componenti - Lado componentes

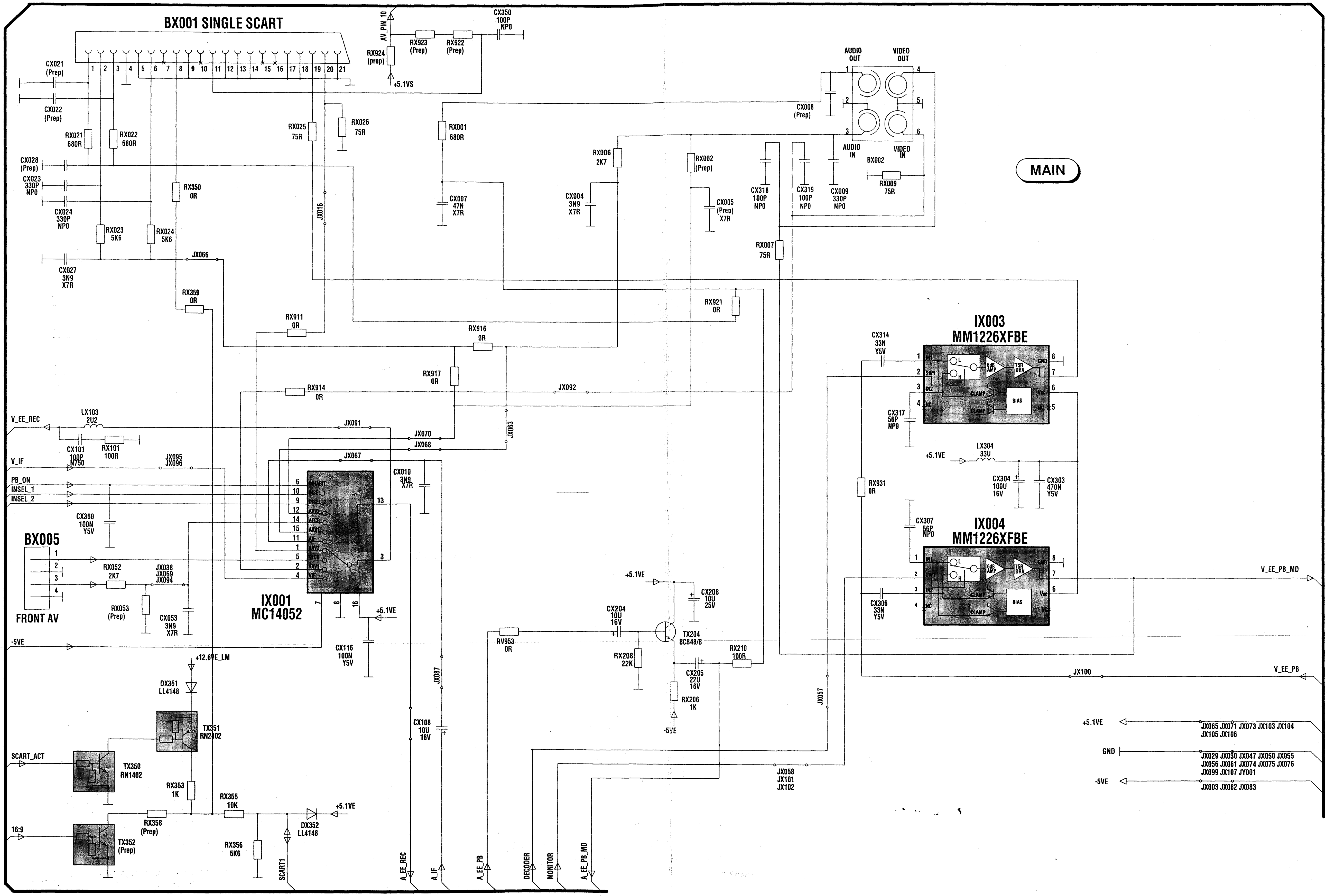

PCB FCB R7000 TL
(BR-FREE)
20808820.SA
PK702
PK703
BK706
WK002
CAMERA PAUSE
PK404
PK701
WJ001
WJ002
BK014
CJJ39
LJ039
QK001
CH+
SK005
REW
SK002
FWD
SK006
SK008
STOP/EJECT
CH-
SK003
JJ008
JJ002
JJ016
JJ017
CLL39
PLAY/PAUSE
SK004
REC
SK001
BKJ08
WJ005
GKF01
SK007
POWER
GK920
BK002
CK039
ZK001
LKF93
LL039
CKK39
PCB KDB R7000 TL
(BR-FREE)
20808820.SA

Solder side -Côté cuivre - Lötseite - Lato saldature - Lado del cobre


PCB FCB R7000 TL
(BR-FREE)
20808820.SA
FDU1
FDU2
WK002
WJ001
WJ002
FDU4
FDU5
FDU6
SK005
SK006
SK002
SK003
SK008
SK004
QK007
WJ005
TK920
JK001
ZK001
FDU3
BK002
PCB KDB R7000 TL
(BR-FREE)
20808820.SA

I/O INTERFACE - INTERFACE ENTREE / SORTIE - EINGANGS UND AUSGANGSINTERFACE - INTERFACCIA INGRESSO / USCITA - INTERFACE ENTRADA / SALIDA

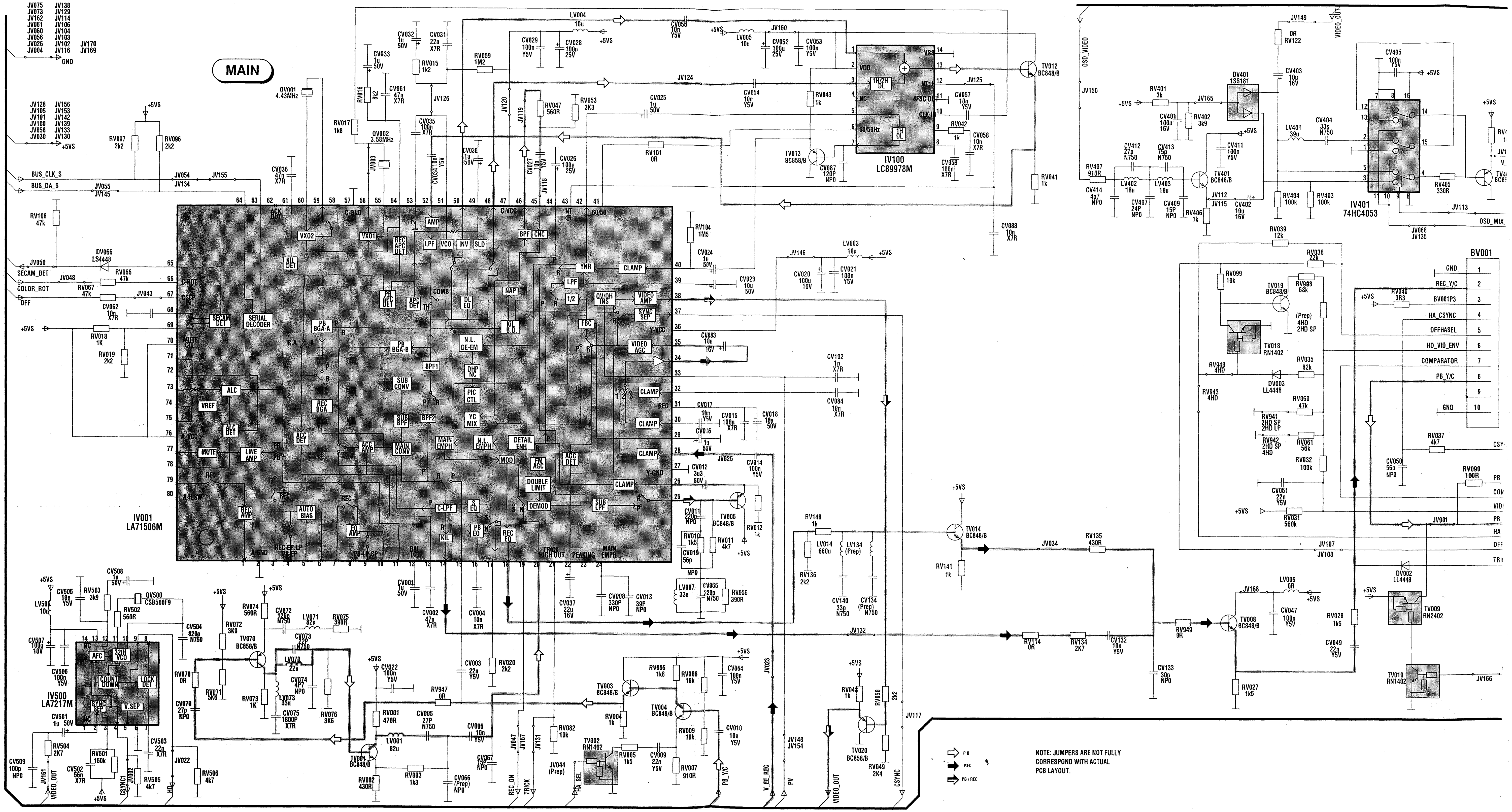
SCHEMATIC DIAGRAM - SCHEMA DE PRINCIPE - SCHALTBILD - SCHEMA - ESQUEMA


BX001 SINGLE SCART
AV_PIN_10
CX350 100P NPO
RX923 (Prep)
RX922 (Prep)
RX924 (prep)
+5.1VS
CX021 (Prep)
CX022 (Prep)
RX021 680R
RX022 680R
RX025 75R
RX026 75R
RX001 680R
CX028 (Prep)
CX023 330P NPO
CX024 330P NPO
RX350 0R
JX016
CX007 47N X7R
RX006 2K7
CX004 3N9 X7R
RX002 (Prep)
CX005 (Prep) X7R
CX318 100P NPO
CX319 100P NPO
CX009 330P NPO
CX008 (Prep)
AUDIO OUT
VIDEO OUT
AUDIO IN
VIDEO IN
BX002
RX009 75R
MAIN
RX023 5K6
RX024 5K6
JX066
CX027 3N9 X7R
RX007 75R
RX359 0R
RX921 0R
RX911 0R
RX916 0R
IX003 MM1226XFBE
CX314 33N Y5V
IN1
SW1
IN2
NC
6dB AMP
75R DRV
GND
CLAMP
BIAS
Vcc
RX917 0R
RX914 0R
JX092
CX317 56P NPO
V_EE_REC
LX103 2U2
JX091
JX070
JX068
JX063
CX101 100P N750
RX101 100R
V_IF
JX095 JX096
JX067
CX010 3N9 X7R
LX304 33U
+5.1VE
CX304 100U 16V
CX303 470N Y5V
PB_ON
INSEL_1
INSEL_2
INHIBIT
AFCB
AAV1
AIF
VAV2
VFCB
VAV1
VIF
RX931 0R
CX360 100N Y5V
CX307 56P NPO
IX004 MM1226XFBE
BX005
FRONT AV
RX052 2K7
JX038 JX069 JX094
RX053 (Prep)
CX053 3N9 X7R
IX001 MC14052
+5.1VE
CX208 10U 25V
V_EE_PB_MD
CX306 33N Y5V
CX204 10U 16V
TX204 BC848/B
-5VE
CX116 100N Y5V
RV953 0R
RX208 22K
RX210 100R
CX205 22U 16V
+12.6VE_LM
JX100
V_EE_PB
DX351 LL4148
RX206 1K
-5VE
TX351 RN2402
JX087
JX057
CX108 10U 16V
+5.1VE
JX065 JX071 JX073 JX103 JX104 JX105 JX106
SCART_ACT
TX350 RN1402
GND
JX029 JX030 JX047 JX050 JX055 JX056 JX061 JX074 JX075 JX076 JX099 JX107 JY001
RX353 1K
JX058 JX101 JX102
-5VE
JX003 JX082 JX083
RX355 10K
+5.1VE
RX358 (Prep)
DX352 LL4148
16:9
TX352 (Prep)
RX356 5K6
SCART1
A_EE_REC
A_IF
A_EE_PB
DECODER
MONITOR
A_EE_PB_MD

NOTE: 1) JUMPERS ARE NOT FULLY CORRESPONDED WITH ACTUAL PCB LAYOUT.
2) BX005 USE IN MODEL WITH FRONT CONNECTOR BOARD ONLY.

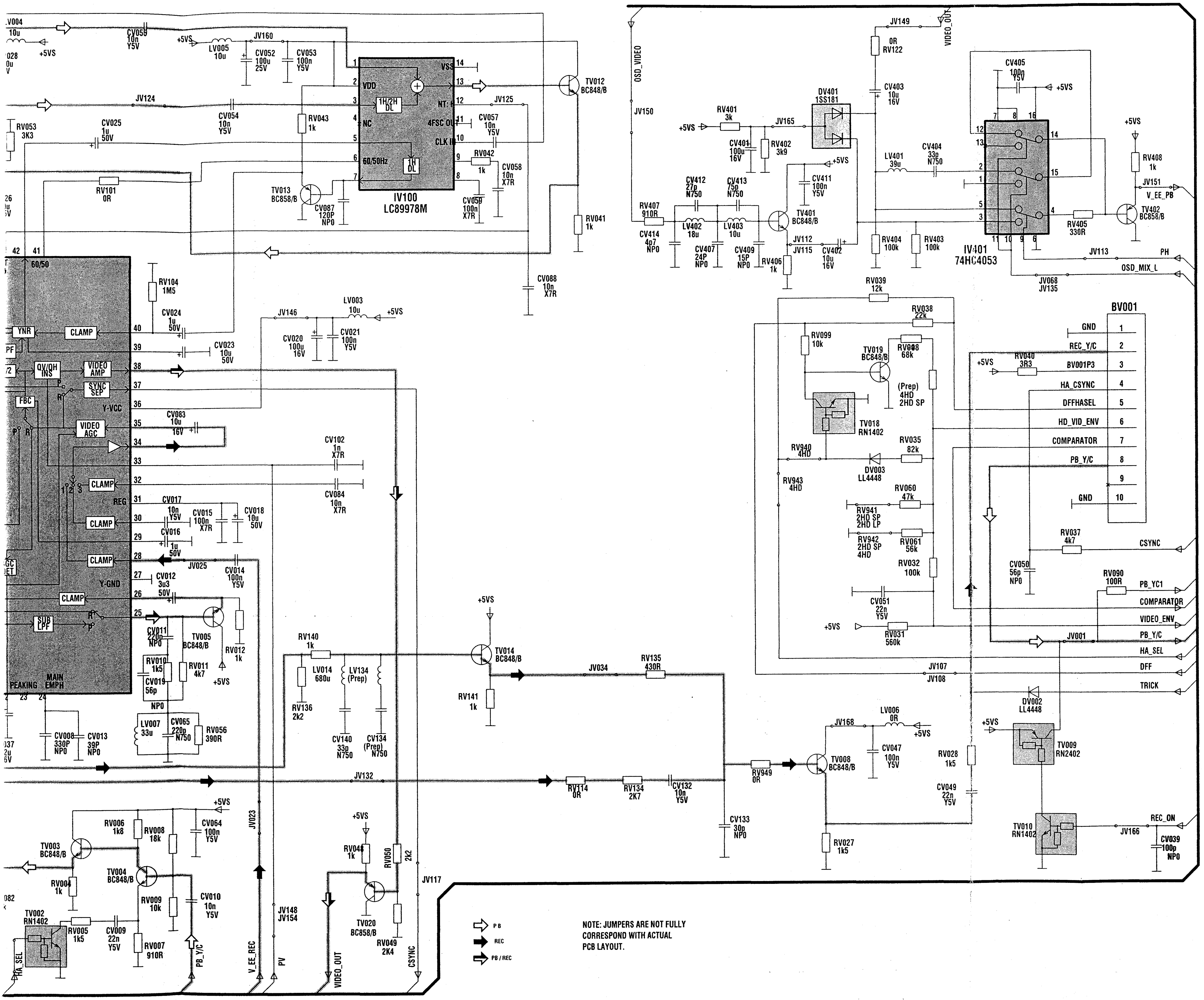
VIDEO SIGNAL PROCESSING - TRAITEMENT LUMINANCE / CHROMINANCE - VIDEOSIGNALVERARBEITUNG - ELABORAZIONE VIDEO - TRATAMIENTO VIDEO

SCHEMATIC DIAGRAM - SCHEMA DE PRINCIPE - SCHALTBILD - SCHEMA - ESQUEMA

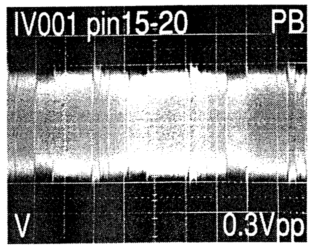

MAIN
IV001
LA71506M
IV100
LC89978M
IV401
74HC4053
IV500
LA7217M
BV001
QV001
4.43MHz
QV002
3.58MHz
QV500
CSB500F9
DV401
1SS181
DV066
LS4448
DV003
LL4448
DV002
LL4448
TV012
BC848/B
TV013
BC858/B
TV019
BC848/B
TV018
RN1402
TV401
BC848/B
TV014
BC848/B
TV008
BC848/B
TV009
RN2402
TV010
RN1402
TV005
BC848/B
TV003
BC848/B
TV004
BC848/B
TV002
RN1402
TV020
BC858/B
TV070
BC858/B
TV001
BC848/B
BUS_CLK_S
BUS_DA_S
SECAM_DET
COLOR_ROT
OFF
+5VS
GND
OSD_VIDEO
VIDEO_OUT
OSD_MIX
CSYNC
REC_ON
TRICK
HA_SEL
PB_Y/C
V_EE_REC
PV
GND
REC_Y/C
BV001P3
HA_CSYNC
DFFHASEL
HD_VID_ENV
COMPARATOR
PB_Y/C
GND
VDD
VSS
1H/2H DL
NC
4FSC OUT
CLK IN
60/50Hz
1H DL
NT: H
ACK OUT
C-GND
C-VCC
60/50
VXO2
VXO1
KIL DET
REC APC DET
LPF
VCO
INV
SLD
AMP
BPF
CNC
YNR
CLAMP
LPF
1/2
QV/QH INS
VIDEO AMP
SYNC SEP
FBC
Y-VCC
VIDEO AGC
CLAMP
REG
CLAMP
CLAMP
Y-GND
CLAMP
SUB LPF
PB APC DET
APC DET
COMB
DL EQ
NAP
KIL B.D.
N.L. DE-EM
DHP NC
PIC CTL
YC MIX
BPF1
SUB CONV
SUB BPF
BPF2
PB BGA-A
PB BGA-B
REC BGA
SECAM DET
SERIAL DECODER
C-ROT
CSCP
MUTE CTL
ALC
VREF
ALC DET
A_VCC
MUTE
LINE AMP
ACC DET
ACC AMP
MAIN CONV
MAIN EMPH
N.L. EMPH
DETAIL ENH
MOD
FM AGC
DOUBLE LIMIT
DEMOD
AGC DET
C-LPF
S EQ
KIL
PB EQ
REC EQ
REC AMP
AUTO BIAS
EQ AMP
A-GND
REC-EP LP
PB-EP
PB-LP SP
BAL TCT
TRICK HIGH OUT
PEAKING
MAIN EMPH
A-H.SW
AFC
32H VCO
COUNT DOWN
LOCK DET
SYNC SEP
V.SEP
NC
(Prep)
2HD SP
2HD LP
4HD

NOTE: JUMPERS ARE NOT FULLY CORRESPOND WITH ACTUAL PCB LAYOUT.

⇨ PB
➡ REC
⇨ PB / REC


IV100
LC89978M
IV401
74HC4053
BV001
GND
REC_Y/C
BV001P3
HA_CSYNC
DFFHASEL
HD_VID_ENV
COMPARATOR
PB_Y/C
GND
CSYNC
PB_YC1
COMPARATOR
VIDEO_ENV
PB_Y/C
HA_SEL
DFF
TRICK
REC_ON
OSD_VIDEO
VIDEO_OUT
OSD_MIX_L
PH
V_EE_PB
V_EE_REC
PV
PB_Y/C
HA_SEL
CSYNC
+5VS
PB
REC
PB / REC

NOTE: JUMPERS ARE NOT FULLY CORRESPOND WITH ACTUAL PCB LAYOUT.



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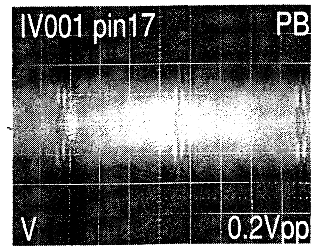
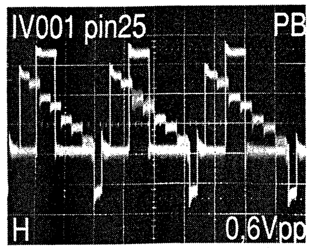


②



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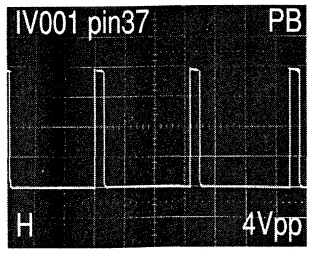

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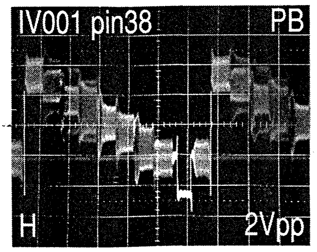

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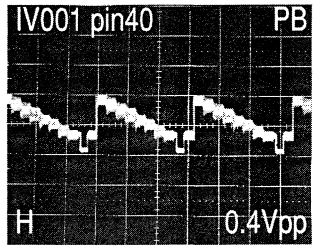

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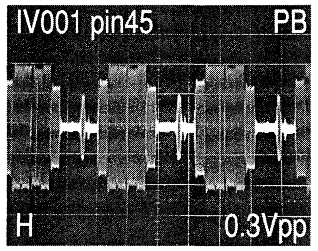

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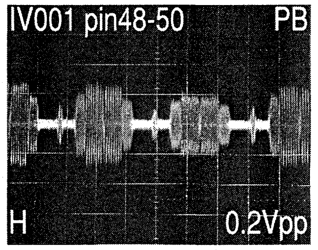

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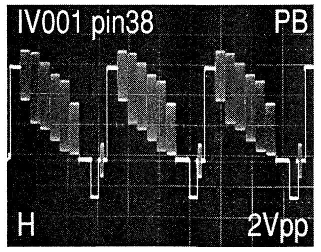

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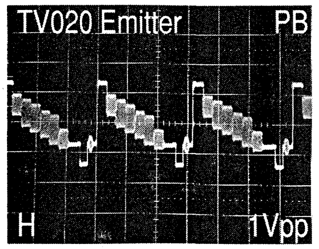


⑩

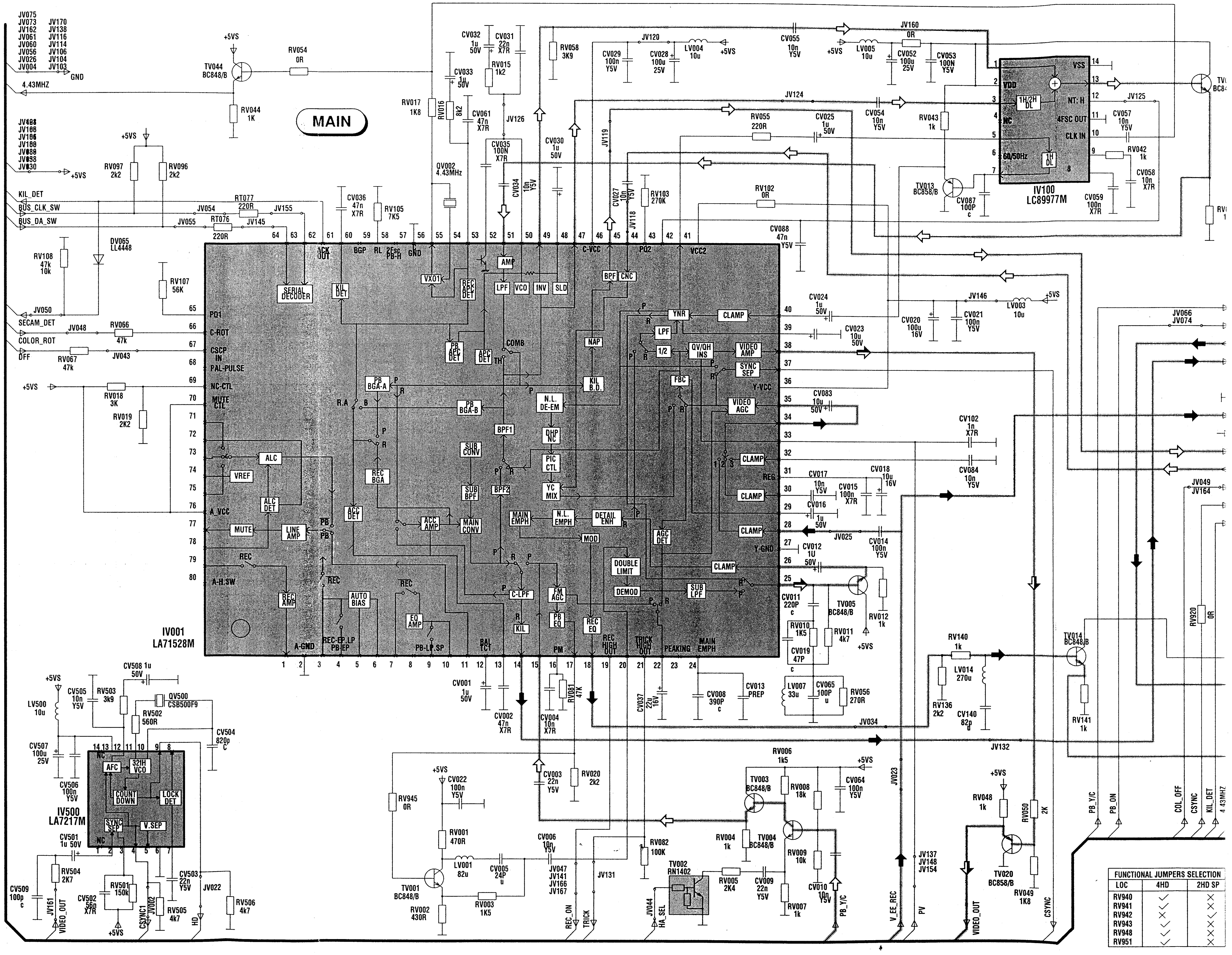
VIDEO		MODE		
LOC	PIN	EE	PLAY	REC.
DV401	1	2.8	2.8	2.7
	2	2.5	2.5	2.5
	3	2.8	2.6	2.8
IV001	1	NC	NC	NC
	2	0	0	0
	3	NC	NC	NC
	4	NC	NC	NC
	5	NC	NC	NC
	6	NC	NC	NC
	7	NC	NC	NC
	8	NC	NC	NC
	9	NC	NC	NC
	10	NC	NC	NC
	11	NC	NC	NC
	12	2.3	2.3	2.3
	13	2.1	1.9	2.1
	14	2.7	0	2.7
	15	0.3	3.2	0
	16	2.7	2.8	2.7
	17	2.7	1.4	2.7
	18	2.2	1.6	2.1
	19	0	0	4.1
	20	3.1	3.1	3.1
	21	0	4.1	0
	22	1.6	1.9	1.6
	23	0	1.6	0
	24	2.5	1.9	2.5
	25	2.2	2.2	2.2
	26	3.1	3.1	3.1
	27	0	0	0
	28	2.3	0.3	2.3
	29	2.2	2.2	2.3
	30	1.8	0.3	1.8
	31	4.1	4.1	4.1
	32	1.8	0.3	1.8
	33	0	0.2	0.2
	34	2.3	2.1	2.3
	35	3.1	3.1	3.1
	36	5	4.9	5
	37	0.6	0.6	0.6
	38	1.9	1.8	1.9
	39	3.3	3.3	3.2
	40	3.1	3	3.1
	41	NC	NC	NC
	42	2	1.9	2
	43	0.4	0.4	0.4
	44	1.8	1.8	1.8
	45	1.9	1.9	1.9
	46	0	2.6	0
	47	5	5	5
	48	2.8	2.8	2.8
	49	4.2	4.2	4.2
	50	2.9	2.8	2.8
	51	4.2	4.2	4.2
	52	3.2	3.2	3.2
	53	0.6	0.5	0.5
	54	2.2	2.2	2.2
	55	5	5	5
	56	5	5	5
	57	0	0	0
	58	NC	NC	NC
	59	2.3	2.3	2.3
	60	3.9	3.9	3.9
	61	1.9	1.9	1.9
	62	0	0	0

VIDEO SIGNAL PROCESSING - TRAITEMENT LUMINANCE / CHROMINANCE - VIDEOSIGNALVERARBEITUNG - ELABORAZIONE VIDEO - TRATAMIENTO VIDEO

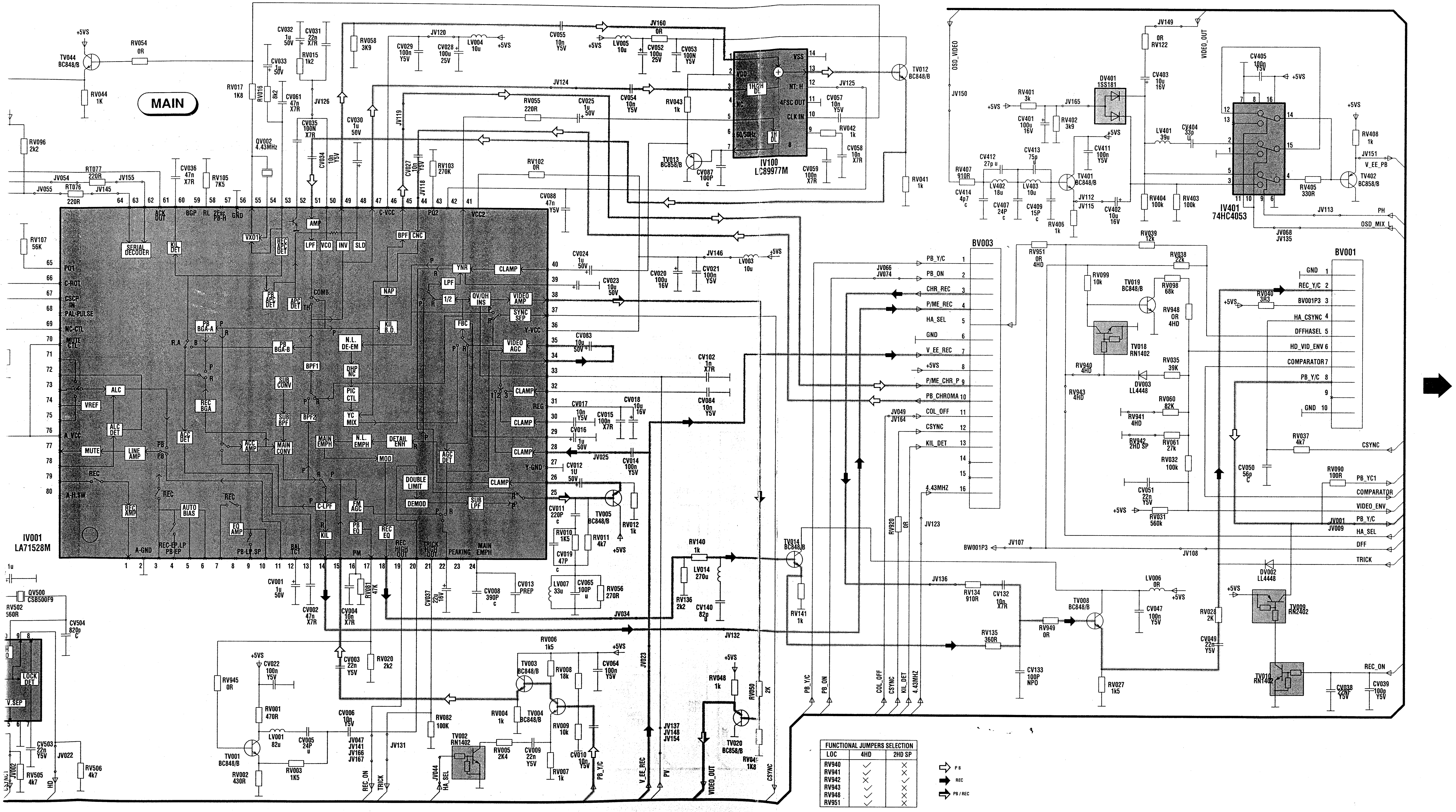
SCHEMATIC DIAGRAM - SCHEMA DE PRINCIPE - SCHALTBILD - SCHEMA - ESQUEMA

VIDEO		MODE		
LOC	PIN	EE	PLAY	REC.
	63	4.8	4.8	4.8
	64	4.8	4.8	4.8
	65	0.3	0.3	0.3
	66	0.3	0.3	0.3
	67	0	0	0
	68	0.8	0.8	0.8
	69	3.5	3.4	3.4
	70	5	5	5
	71	NC	NC	NC
	72	NC	NC	NC
	73	NC	NC	NC
	74	NC	NC	NC
	75	NC	NC	NC
	76	5	5	5
	77	NC	NC	NC
	78	NC	NC	NC
	79	NC	NC	NC
	80	NC	NC	NC
IV100	1	2.5	2.5	2.5
	2	5	5	5
	3	2.5	2.5	2.5
	4	NC	NC	NC
	5	2.3	2.3	2.3
	6	NC	NC	NC
	7	1.5	1.5	1.5
	8	8.9	8.9	8.9
	9	2.2	2.2	2.2
	10	0.9	0.9	0.9
	11	0	0	0
	12	0.4	0.4	0.4
	13	1.9	1.9	1.9
	14	0	0	0
IV401	1	0	0	0
	2	0.4	0.4	0.4
	3	2.5	2.5	2.5
	4	2.8	2.7	2.8
	5	2.8	3.1	2.8
	6	0	0	0
	7	0	0	0
	8	0	0	0
	9	0	0	0
	10	5.1	5.1	5.1
	11	5.1	5.1	5.1
	12	0	0	0
	13	NC	NC	NC
	14	2.8	2.6	2.8
	15	0	0	0
	16	5	5	5
IV500	1	NC	NC	NC
	2	2.4	2.4	2.4
	3	3.3	3.4	3.3
	4	3.8	3.8	3.8
	5	NC	NC	NC
	6	0	0	0
	7	4.9	4.9	4.9
	8	NC	NC	NC
	9	3.9	3.9	3.8
	10	4	4	4
	11	2.7	2.7	2.7
	12	2.2	2.2	2.2
	13	5	5	5
	14	NC	NC	NC

VIDEO		MODE		
LOC	PIN	EE	PLAY	REC.
TV001	E	1.2	1.2	1.2
	B	1.9	1.9	1.9
	C	3.7	3.7	3.7
TV002	E	0	0	0
	B	0	0	0
	C	0.3	0.3	0.3
TV003	E	2.7	2.6	2.6
	B	3.3	3.3	3.3
	C	5	5	5
TV004	E	1.1	1.1	1.1
	B	1.8	1.8	1.8
	C	3.3	3.3	3.3
TV005	E	1.5	1.5	1.5
	B	2.1	2.1	2.1
	C	5	5	5
TV008	E	0.9	0.4	0.9
	B	1.5	1	1.5
	C	5	5	5
TV009	E	5	5	5
	B	5	5	0
	C	1.9	1.8	5
TV010	E	0	0	0
	B	0	0	4.1
	C	5	5	0
TV012	E	1.3	1.3	1.3
	B	1.9	1.9	1.9
	C	5	5	5
TV013	E	2.1	2.1	2.1
	B	1.5	1.5	1.5
	C	0	0	0
TV014	E	1.5	1	1.5
	B	2.1	1.6	2.1
	C	5	5	5
TV020	E	1.6	1.5	1.6
	B	1	1	1
	C	0	0	0
TV044	E	1.6	1.6	1.6
	B	2.3	2.2	2.2
	C	5	5	5
TV070	E	3.6	3.6	3.6
	B	3	2.9	2.9
	C	1.9	1.9	1.9
TV401	E	1.4	1.4	1.4
	B	2	2	2
	C	5	5	5
TV402	E	3.4	3.3	3.4
	B	2.8	2.6	2.8
	C	0	0	0


MAIN
IV001
LA71528M
IV100
LC89977M
IV500
LA7217M
4.43MHZ
KIL_DET
BUS_CLK_SW
BUS_DA_SW
SECAM_DET
COLOR_ROT
SERIAL DECODER
VXO1
AMP
LPF
VCO
INV
SLD
BPF
CNC
YNR
CLAMP
NAP
KIL B.D.
FBC
VIDEO AMP
SYNC SEP
VIDEO AGC
N.L. DE-EM
BPF1
DHP NC
PIC CTL
YC MIX
ALC
VREF
ALC DET
MUTE
LINE AMP
REC BGA
ACC DET
ACC AMP
MAIN CONV
SUB BPF
BPF2
MAIN EMPH
N.L. EMPH
DETAIL ENH
AGC DET
MOD
DOUBLE LIMIT
DEMOD
SUB LPF
REC AMP
AUTO BIAS
EQ AMP
C-LPF
FM AGC
PB EQ
KIL
REC EQ
AFC
32fH VCO
COUNT DOWN
LOCK DET
SYNC SEP
V.SEP
VIDEO_OUT
REC_ON
TRICK
HA_SEL
PB_Y/C
V_EE_REC
PV
CSYNC
PB_ON
COL_OFF
4.43MHZ

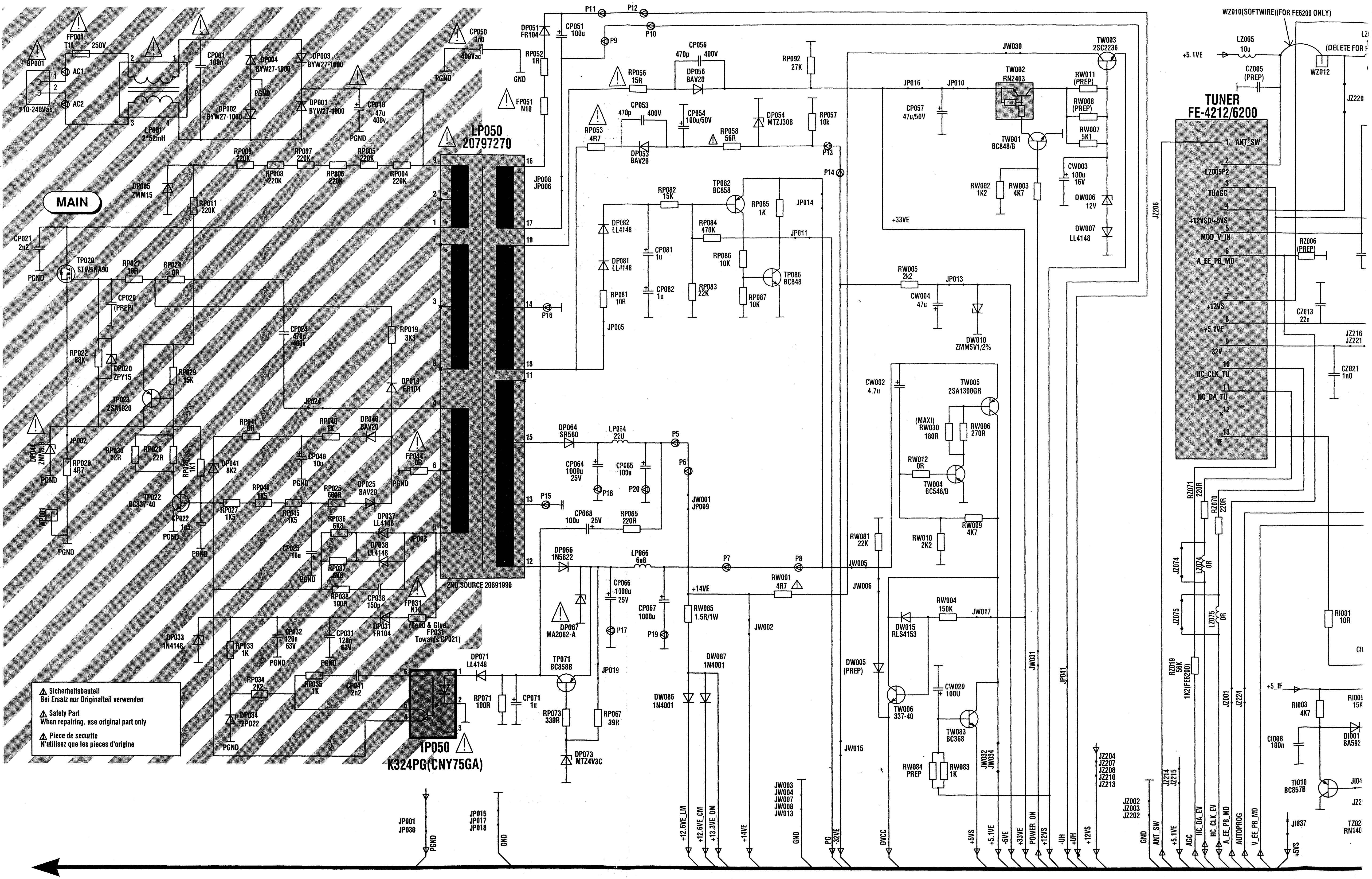
FUNCTIONAL JUMPERS SELECTION		
LOC	4HD	2HD SP
RV940	✓	×
RV941	✓	×
RV942	×	✓
RV943	✓	×
RV948	✓	×
RV951	✓	×


MAIN
IV001
LA71528M
IV100
LC89977M
IV401
74HC4053
BV003
BV001
SERIAL DECODER
KIL DET
VXO1
AMP
LPF
VCO
INV
SLD
BPF
CNC
YNR
CLAMP
NAP
LPF
1/2
QV/QH INS
VIDEO AMP
SYNC SEP
KIL B.D.
FBC
N.L. DE-EM
VIDEO AGC
DHP NC
PIC CTL
YC MIX
BPF1
BPF2
SUB CONV
SUB BPF
REC BGA
PB BGA-A
PB BGA-B
ALC
ALC DET
VREF
MUTE
LINE AMP
ACC DET
ACC AMP
MAIN CONV
MAIN EMPH
N.L. EMPH
DETAIL ENH
MOD
AGC DET
DOUBLE LIMIT
DEMOD
SUB LPF
C-LPF
FM AGC
PB EQ
REC EQ
KIL
REC AMP
AUTO BIAS
EQ AMP
LOCK DET
V.SEP
PB_Y/C
PB_ON
CHR_REC
P/ME_REC
HA_SEL
GND
V_EE_REC
+5VS
P/ME_CHR_P
PB_CHROMA
COL_OFF
CSYNC
KIL_DET
4.43MHZ
REC_Y/C
BV001P3
HA_CSYNC
DFFHASEL
HD_VID_ENV
COMPARATOR
PB_Y/C
V_EE_PB
OSD_MIX
OSD_VIDEO
VIDEO_OUT
PH
PB_YC1
COMPARATOR
VIDEO_ENV
PB_Y/C
HA_SEL
DFF
TRICK
REC_ON
REC_ON
TRICK
HA_SEL
PB_Y/C
V_EE_REC
PV
VIDEO_OUT
CSYNC
HD
P B
REC
PB / REC

FUNCTIONAL JUMPERS SELECTION		
LOC	4HD	2HD SP
RV940	✓	✗
RV941	✓	✗
RV942	✗	✓
RV943	✓	✗
RV948	✓	✗
RV951	✓	✗

POWER SUPPLY INTERFACE / TUNER / IF SECTION - INTERFACE ALIMENTATION / TUNER / FI - NETZ-EIL / TUNER / ZF - ALIMENTAZIONE / TUNER / IF - INTERFAZ A

SCHEMATIC DIAGRAM - SCHEMA DE PRINCIPE - SCHALTBILD - SCHEMA - ESQUEMA


MAIN
BP001
110-240Vac
AC1
AC2
FP001
T1L 250V
LP001
2*52mH
CP001
100n
DP004
BYW27-1000
DP003
BYW27-1000
DP002
BYW27-1000
DP001
BYW27-1000
CP010
47u
400v
PGND
CP050
1n0
400Vac
GND
RP009 220K
RP007 220K
RP005 220K
RP008 220K
RP006 220K
RP004 220K
DP005
ZMM15
RP011
220K
CP021
2n2
TP020
STW5NA90
RP021 10R
RP024 0R
CP020
(PREP)
RP022
68K
DP020
ZPY15
RP029
15K
TP023
2SA1020
CP024
470p
400V
RP019
3K3
DP019
FR104
JP024
DP044
ZMM6,8
JP002
RP020
4R7
RP030
22R
RP028
22R
RP026
1K1
DP041
8K2
RP041 0R
RP040 1K
DP040
BAV20
CP040
10u
FP044
0R
TP022
BC337-40
CP022
1n5
RP027 1K5
RP046 1K5
RP045 1K5
RP025 680R
DP025 BAV20
RP036 6K8
DP037 LL4148
DP038 LL4148
RP037 6K8
JP003
CP025 10u
RP038 100R
CP038 150p
FP031 N10
(Bend & Glue FP031 Towards CP021)
DP031 FR104
DP033 1N4148
RP033 1K
CP032 120n 63V
CP031 120n 63V
RP034 2K2
RP035 1K
CP041 2n2
DP034 ZPD22
VP001
LP050
20797270
2ND SOURCE 20891990
IP050
K324PG(CNY75GA)
DP051 FR104
CP051 100u
P11
P12
P9
P10
RP052 1R
FP051 N10
CP056 470p 400V
DP056 BAV20
RP056 15R
RP092 27K
CP053 470p 400V
CP054 100u/50V
DP053 BAV20
RP053 4R7
RP058 56R
DP054 MTZJ30B
RP057 10K
P13
P14
JP008
JP006
RP082 15K
TP082 BC858
RP085 1K
JP014
DP082 LL4148
RP084 470K
JP011
CP081 1u
DP081 LL4148
RP086 10K
TP086 BC848
RP081 10R
CP082 1u
RP083 22K
RP087 10K
JP005
P16
DP064 SR560
LP064 22U
P5
P6
CP064 1000u 25V
CP065 100u
P18
P20
P15
CP068 100u 25V
RP065 220R
JW001
JP009
DP066 1N5822
LP066 6u8
P7
P8
CP066 1000u 25V
CP067 1000u
+14VE
RW085 1.5R/1W
RW001 4R7
DP067 MA2062-A
P17
P19
JW002
DW087 1N4001
DW086 1N4001
DP071 LL4148
RP071 100R
CP071 1u
TP071 BC858B
RP073 330R
RP067 39R
JP019
DP073 MTZ4V3C
JP001
JP030
JP015
JP017
JP018
PGND
GND
JW030
TW003 2SC2236
TW002 RN2403
JP016
JP010
CP057 47u/50V
RW011 (PREP)
RW008 (PREP)
RW007 5K1
TW001 BC848/B
RW002 1K2
RW003 4K7
CW003 100u 16V
DW006 12V
DW007 LL4148
+33VE
RW005 2k2
JP013
CW004 47u
DW010 ZMM5V1/2%
CW002 4.7u
TW005 2SA1300GR
(MAXI) RW030 180R
RW006 270R
RW012 0R
TW004 BC548/B
RW009 4K7
RW081 22K
RW010 2K2
JW005
JW006
RW004 150K
JW017
DW015 RLS4153
DW005 (PREP)
CW020 100U
TW006 337-40
TW083 BC368
RW084 PREP
RW083 1K
JW015
JW003 JW004 JW007 JW008 JW013
JW031
JP041
JW032 JW034
JZ206
WZ010(SOFTWIRE)(FOR FE6200 ONLY)
LZ005 10u
+5.1VE
CZ005 (PREP)
WZ012
(DELETE FOR
TUNER
FE-4212/6200
1 ANT_SW
2 LZ005P2
3 TUAGC
4
+12VSD/+5VS
5 MOD_V_IN
6 A_EE_PB_MD
7 +12VS
8 +5.1VE
9 32V
10 IIC_CLK_TU
11 IIC_DA_TU
12
13 IF
JZ220
RZ006 (PREP)
CZ013 22n
JZ216 JZ221
CZ021 1n0
RZ071 220R
RZ070 220R
JZ074
LZ074 0R
JZ075
LZ075 0R
RZ019 56K 1K2(FE6200)
RI001 10R
+5_IF
RI003 4K7
RI006 15K
CI008 100n
DI001 BA592
TI010 BC857B
TZ02 RN140
JZ204 JZ207 JZ208 JZ210 JZ213
JZ002 JZ003 JZ202
JZ214 JZ215
JZ001 JZ224
JI037
+12.6VE_LM
+12.6VE_CM
+13.3VE_DM
+14VE
GND
PG
-32VE
DVCC
+5VS
+5.1VE
-5VE
+33VE
POWER_ON
+12VS
-UH
+UH
+12VS
GND
ANT_SW
+5.1VE
AGC
IIC_DA_EV
IIC_CLK_EV
A_EE_PB_MD
AUTOPROG
V_EE_PB_MD
+5VS

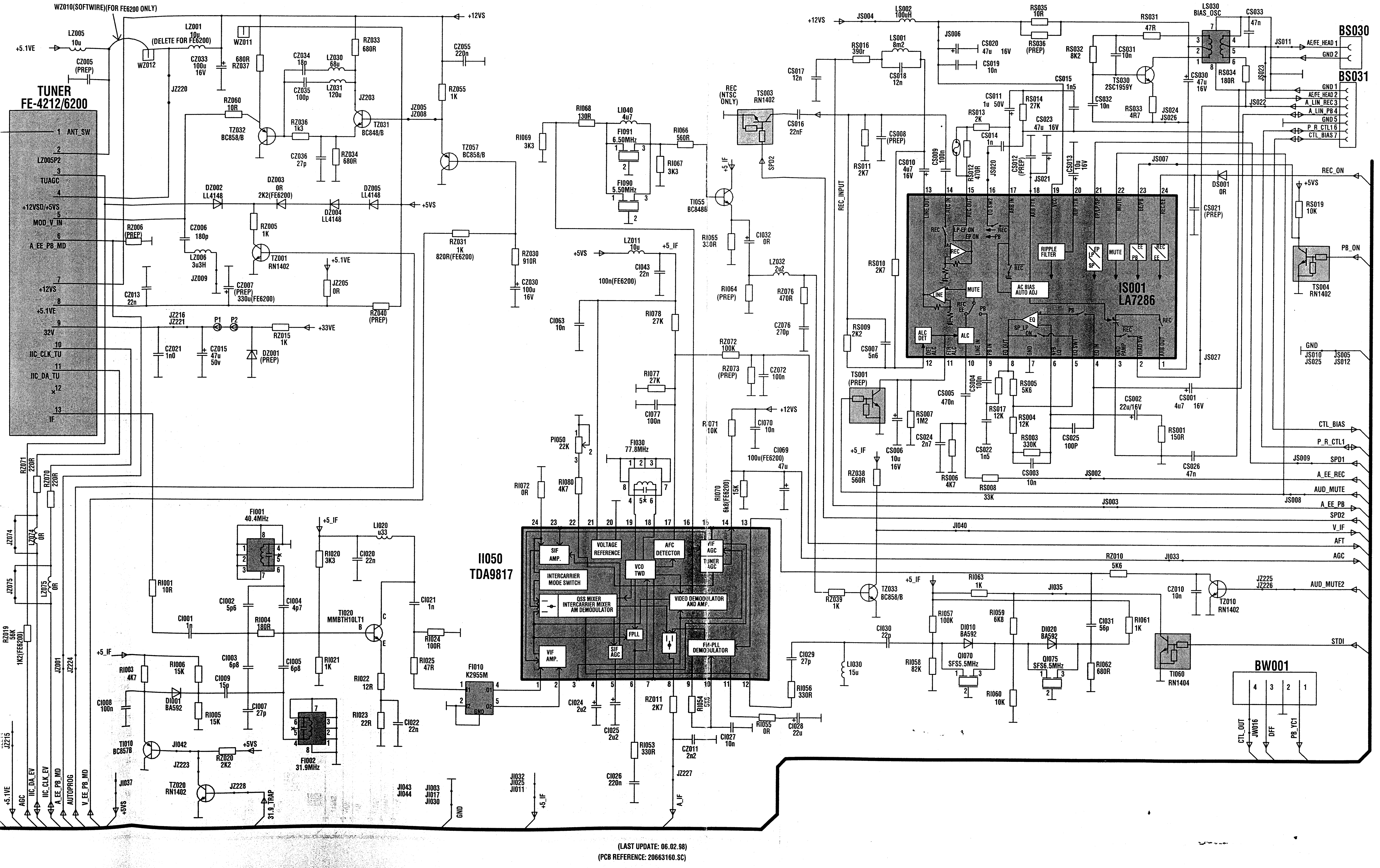
⚠ Sicherheitsbauteil
Bei Ersatz nur Originalteil verwenden

⚠ Safety Part
When repairing, use original part only

⚠ Piece de securite
N'utilisez que les pieces d'origine

* POSITION PREPARED WITHOUT VALUE ARE NOT USED.

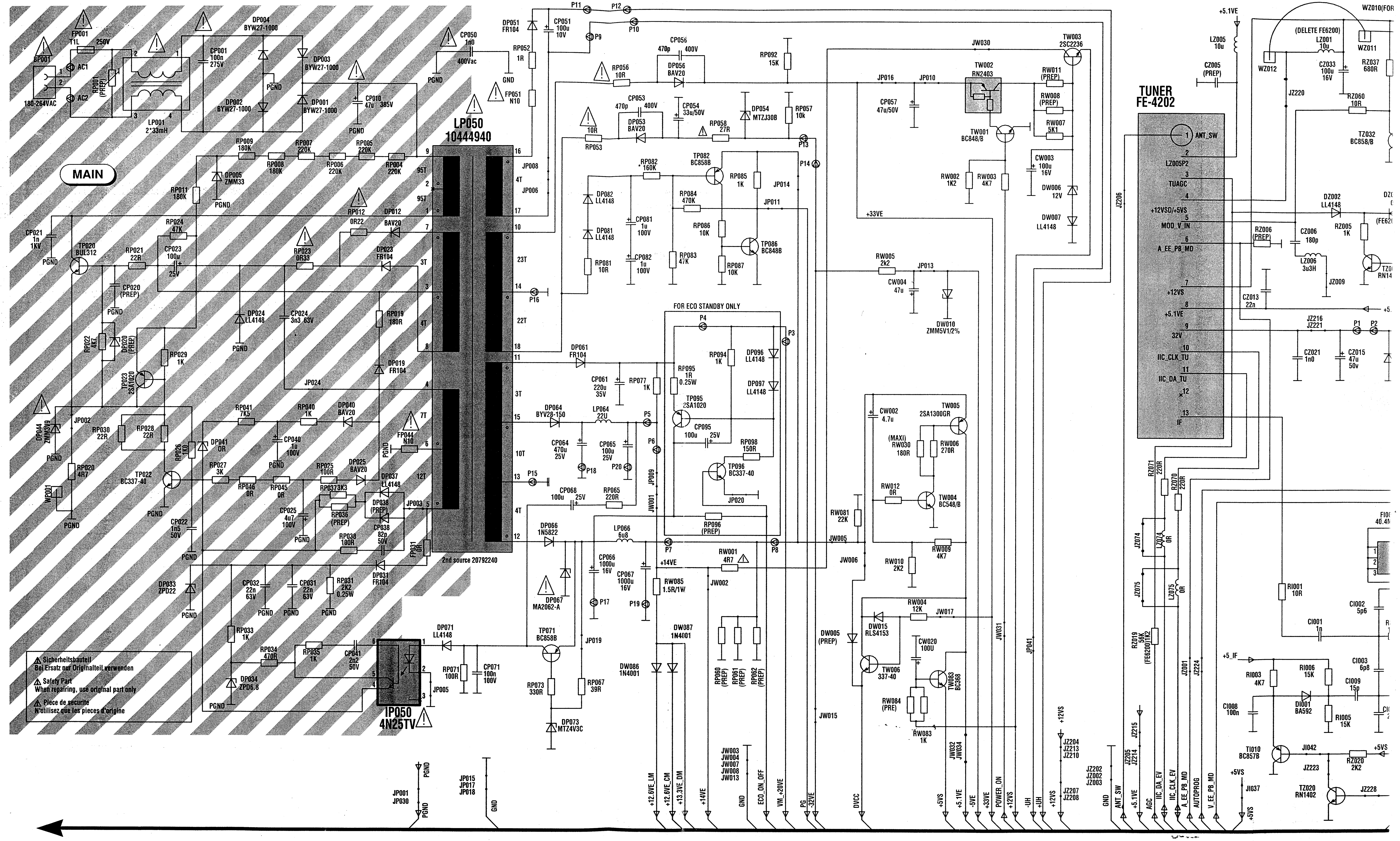
UNER / IF - INTERFAZ ALIMENTACIÒN / TUNER / IF


TUNER
FE-4212/6200
WZ010(SOFTWIRE)(FOR FE6200 ONLY)
(DELETE FOR FE6200)
1 ANT_SW
2 LZ005P2
3 TUAGC
4 +12VSD/+5VS
5 MOD_V_IN
6 A_EE_PB_MD
7 +12VS
8 +5.1VE
9 32V
10 IIC_CLK_TU
11 IIC_DA_TU
12
13 IF
+5.1VE
+12VS
+5VS
+33VE
+5_IF
TZ032 BC858/B
TZ031 BC848/B
TZ057 BC858/B
TZ001 RN1402
TI020 MMBTH10LT1
TI010 BC857B
TZ020 RN1402
FI001 40.4MHz
FI002 31.9MHz
FI010 K2955M
FI030 77.8MHz
FI091 6.50MHz
FI090 5.50MHz
TI055 BC848B
II050
TDA9817
SIF AMP.
VOLTAGE REFERENCE
AFC DETECTOR
VIF AGC
TUNER AGC
VCO TWD
INTERCARRIER MODE SWITCH
QSS MIXER INTERCARRIER MIXER AM DEMODULATOR
VIDEO DEMODULATOR AND AMP.
FPLL
SIF AGC
FM-PLL DEMODULATOR
VIF AMP.
REC (NTSC ONLY)
TS003 RN1402
IS001
LA7286
RIPPLE FILTER
MUTE
AC BIAS AUTO ADJ
ALC DET
ALC
EQ
TS030 2SC1959Y
TS001 (PREP)
TS004 RN1402
TZ033 BC858/B
TZ010 RN1402
TI060 RN1404
QI070 SFS5.5MHz
QI075 SFS6.5MHz
LS030 BIAS_OSC
BS030
AE/FE_HEAD 1
GND 2
BS031
GND 1
AE/FE_HEAD 2
A_LIN_REC 3
A_LIN_PB 4
GND 5
P_R_CTL1 6
CTL_BIAS 7
REC_ON
PB_ON
REC_INPUT
CTL_BIAS
P_R_CTL1
SPD1
A_EE_REC
AUD_MUTE
A_EE_PB
SPD2
V_IF
AFT
AGC
AUD_MUTE2
STDI
BW001
CTL_OUT
JW016
DFF
PB_YC1
+5.1VE
AGC
IIC_DA_EV
IIC_CLK_EV
A_EE_PB_MD
AUTOPROG
V_EE_PB_MD
+5VS
31.9_TRAP
GND
+5_IF
A_IF

(LAST UPDATE: 06.02.98)
(PCB REFERENCE: 20663160.SC)

POWER SUPPLY INTERFACE / TUNER / IF SECTION - INTERFACE ALIMENTATION / TUNER / FI - NETZTEIL / TUNER / ZF - ALIMENTAZIONE / TUNER / IF - INTERFAZ ALIMENTA

SCHEMATIC DIAGRAM - SCHEMA DE PRINCIPE - SCHALTBILD - SCHEMA - ESQUEMA


MAIN
LP050
10444940
TUNER
FE-4202
IP050
4N25TV
BP001
180-264VAC
AC1
AC2
FP001
T1L 250V
LP001
2*33mH
CP001
100n
275V
DP004
BYW27-1000
DP003
BYW27-1000
DP002
BYW27-1000
DP001
BYW27-1000
CP010
47u 385V
CP050
1n0
400Vac
DP051
FR104
CP051
100u
10V
RP052
1R
FP051
N10
TP020
BUL312
TP023
2SA1020
TP022
BC337-40
TP082
BC858B
TP086
BC848B
TP095
2SA1020
TP096
BC337-40
TP071
BC858B
DP067
MA2062-A
DP073
MTZ4V3C
DP054
MTZJ30B
DP064
BYV28-150
DP066
1N5822
DP071
LL4148
DW086
1N4001
DW087
1N4001
TW001
BC848/B
TW002
RN2403
TW003
2SC2236
TW004
BC548/B
TW005
2SA1300GR
TW006
337-40
TW083
BC368
DW015
RLS4153
DW010
ZMM5V1/2%
FOR ECO STANDBY ONLY
2nd source 20792240
ANT_SW
TUAGC
+12VSD/+5VS
MOD_V_IN
A_EE_PB_MD
+12VS
+5.1VE
32V
IIC_CLK_TU
IIC_DA_TU
IF
TI010
BC857B
TZ020
RN1402
DI001
BA592
+12.6VE_LM
+12.6VE_CM
+13.3VE_DM
+14VE
GND
ECO_ON_OFF
VM_+20VE
PG
-32VE
DVCC
+5VS
+5.1VE
-5VE
+33VE
POWER_ON
+12VS
-UH
+UH
AGC
IIC_DA_EV
IIC_CLK_EV
AUTOPROG
V_EE_PB_MD
PGND
Sicherheitsbauteil
Bei Ersatz nur Originalteil verwenden
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When repairing, use original part only
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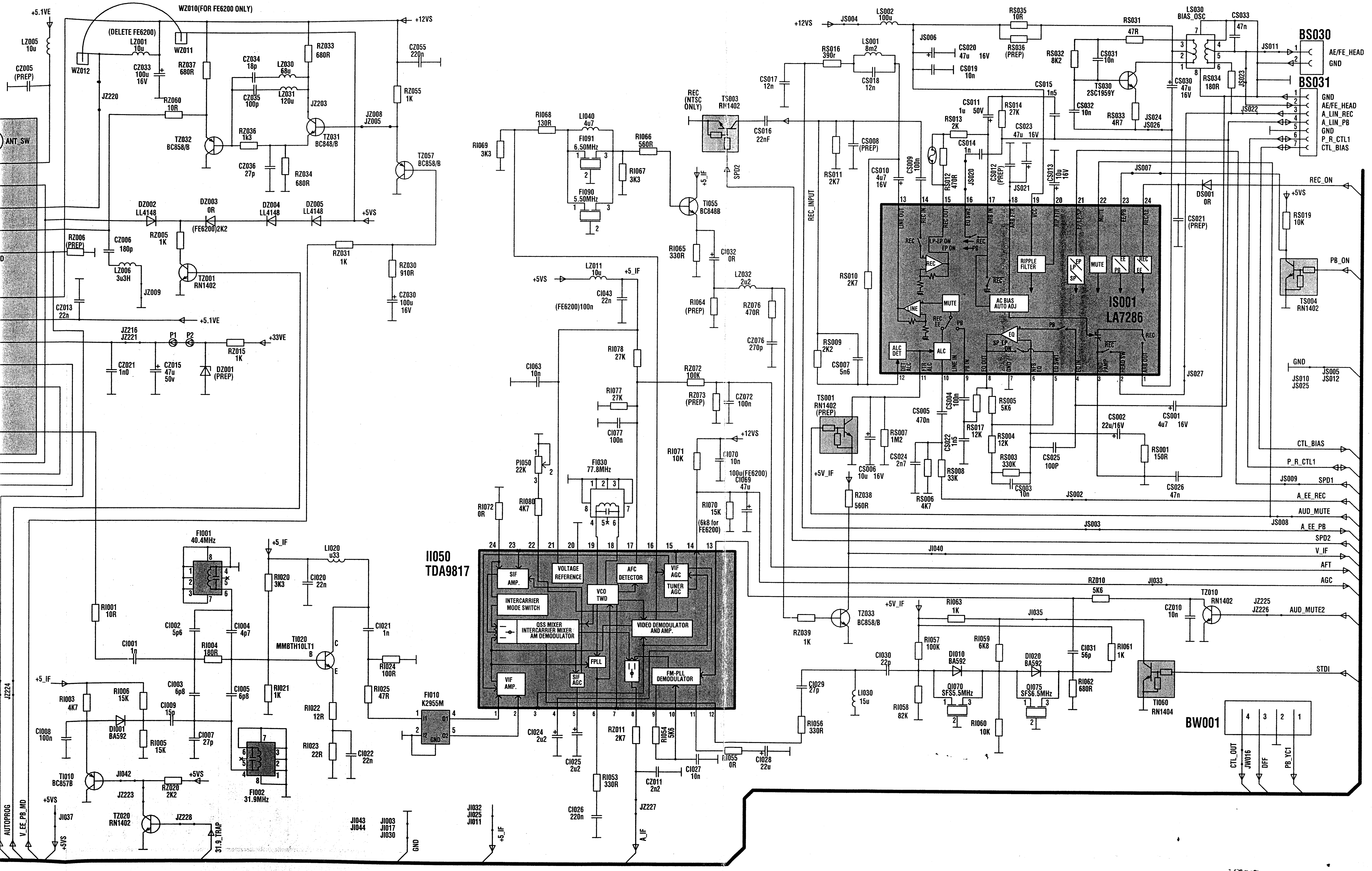
WZ010(FOR FE6200 ONLY)
(DELETE FE6200)
ANT_SW
TZ032 BC858/B
TZ031 BC848/B
TZ057 BC858/B
TZ001 RN1402
TI010 BC857B
TZ020 RN1402
TI020 MMBTH10LT1
FI001 40.4MHz
FI002 31.9MHz
FI010 K2955M
FI030 77.8MHz
FI091 6.50MHz
FI090 5.50MHz
II050
TDA9817
SIF AMP.
VOLTAGE REFERENCE
AFC DETECTOR
VIF AGC
TUNER AGC
VCO TWD
INTERCARRIER MODE SWITCH
QSS MIXER INTERCARRIER MIXER AM DEMODULATOR
VIDEO DEMODULATOR AND AMP.
FPLL
VIF AMP.
SIF AGC
FM-PLL DEMODULATOR
TI055 BC848B
TS003 RN1402
TS001 RN1402 (PREP)
TS030 2SC1959Y
TS004 RN1402
TZ033 BC858/B
TZ010 RN1402
TI060 RN1404
IS001
LA7286
RIPPLE FILTER
MUTE
AC BIAS AUTO ADJ
ALC DET
ALC
EQ
BS030
AE/FE_HEAD
GND
BS031
GND
AE/FE_HEAD
A_LIN_REC
A_LIN_PB
GND
P_R_CTL1
CTL_BIAS
REC_ON
PB_ON
REC_INPUT
CTL_BIAS
P_R_CTL1
SPD1
A_EE_REC
AUD_MUTE
A_EE_PB
SPD2
V_IF
AFT
AGC
AUD_MUTE2
STDI
BW001
CTL_OUT
JW016
DFF
PB_YC1
AUTOPROG
V_EE_PB_MD
A_IF
GND
+5_IF
+5VS
+12VS
+33VE
+5.1VE
QI070 SFS5.5MHz
QI075 SFS6.5MHz
DI010 BA592
DI020 BA592
DI001 BA592
31.9_TRAP

* : Modification

(LAST UPDATE : 29.07.97)
(PCB REFERENCE : 20663160.SB)

Abbreviations - Abreviations - Abkürzungen - Abbreviazioni - Abreviaciones

AC	Alternating Current
ACC	Automatic Colour Control
ACK	Automatic Colour Killer
AD.REF	Analog/Digital Converter Reference
AE	Audio Erase
AFC	Automatic Frequency Control
AGC	Automatic Gain Control
A_IF	Audio IF
ALC	Automatic Level Control
AMP	Amplifier
APC	Automatic Phase Control
AP.CONT	Aperture Control
AV	Audio-Video
A/V SWP	Audio/Video Switching Point (DRUM FF)
B.EMPH	Burst Emphasis
B.DEEMPH	Burst Deemphasis
BG	Burst Gate
BID	Burst Identification
BLK	Blanking
BPF	Band Pass Filter
CAP	Capstan
CBC	Cable Box Control (Satellite Control)
CCD	Charge Coupled Device
CH	Channel
CFG	Capstan Frequency Generator
CLK	Clock
COMP	Comparator
CONV	Converter
CPWM	Capstan Pulse Width Modulation
C-REG	Capstan Regulation
CR	Color Rotary
CS	Chip Select
CSYNC	Composite Synch
CTL	Control
DC	Direct Current
D.LIM	Double Limitter
DEEMPH	Deemphasis
DET	Detector
D-FG	Drum Frequency Generator
DFF	Drum Flip Flop
DIF.EQ	Differential Equalizer
DIG	Digital
DLY	Delay
DOC	Drop Out Compensation
E-E	Electronic-Electronic
EMPH	Emphasis
ENV	Envelope
EP	Extended Play
EQ	Equalizer
F.E	Full Erase
F.REW	Fast Rewind
F.FWD	Fast Forward
F/R	Forward/Rewind
FCB	Front Connection Board
FF	Fast Forward
FG	Frequency Generator
FMCI	FM Carrier Interleave
FWD	Forward
GND	Ground
GCA	Gain Controlled Amplifier
HASEL	Head Amplifier Select
HAB	Head Amplifier Board
HD	Horizontal Synch Pulse
HPF	High Pass Filter
I.R	Infra Red
ID	Identification
INP/IN	Input
KDB	Key Display Board
LIM	Limitter
LP	Long Play
LPF	Low Pass Filter
MESECAM	Middle East Secam
NC	Noise Canceller
OSD	On Screen Display
PB	Play Back
PB_C	Play Back Chroma
PCB	Printed Circuit Board
PDC	Program Delivery Control
PG	Pulse Generator
PH	Pseudo Horizontal Synch
PIF	Picture IF
PLL	Phase Locked Loop
PS	Phase Switch
PV	Pseudo Vertical Synch
PWM	Pulse Width Modulation
REC	Record
REC_C	Record Chroma
REW	Rewind
REV	Reverse
SCL	Serial Clock
SDA	Serial Data
SEC	SECAM
SU REEL	Supply Reel
SMPS	Switch Mode Power Supply
SP	Standard Play
SS	Synch Separator
SW	Switch
TU REEL	Take Up Reel
TMB	Terminal Board
VAL	Components without value and not on the PCB
VCA	Voltage Controlled Amplifier
VCO	Voltage Controlled Oscillator
VCR	Video Cassette Recorder
VD	Supply Voltage Digital
VE	Voltage (Ever)
V_ENV	Video Envelope
V_IF	Video IF
VS	Voltage (Switched)
VM	Motor Voltage (Drum & Loading motor)
VMC	Motor Voltage (Capstan motor)
VPS	Video Program System
W/D	White/Dark
Y/C	Luminance/Chrominance

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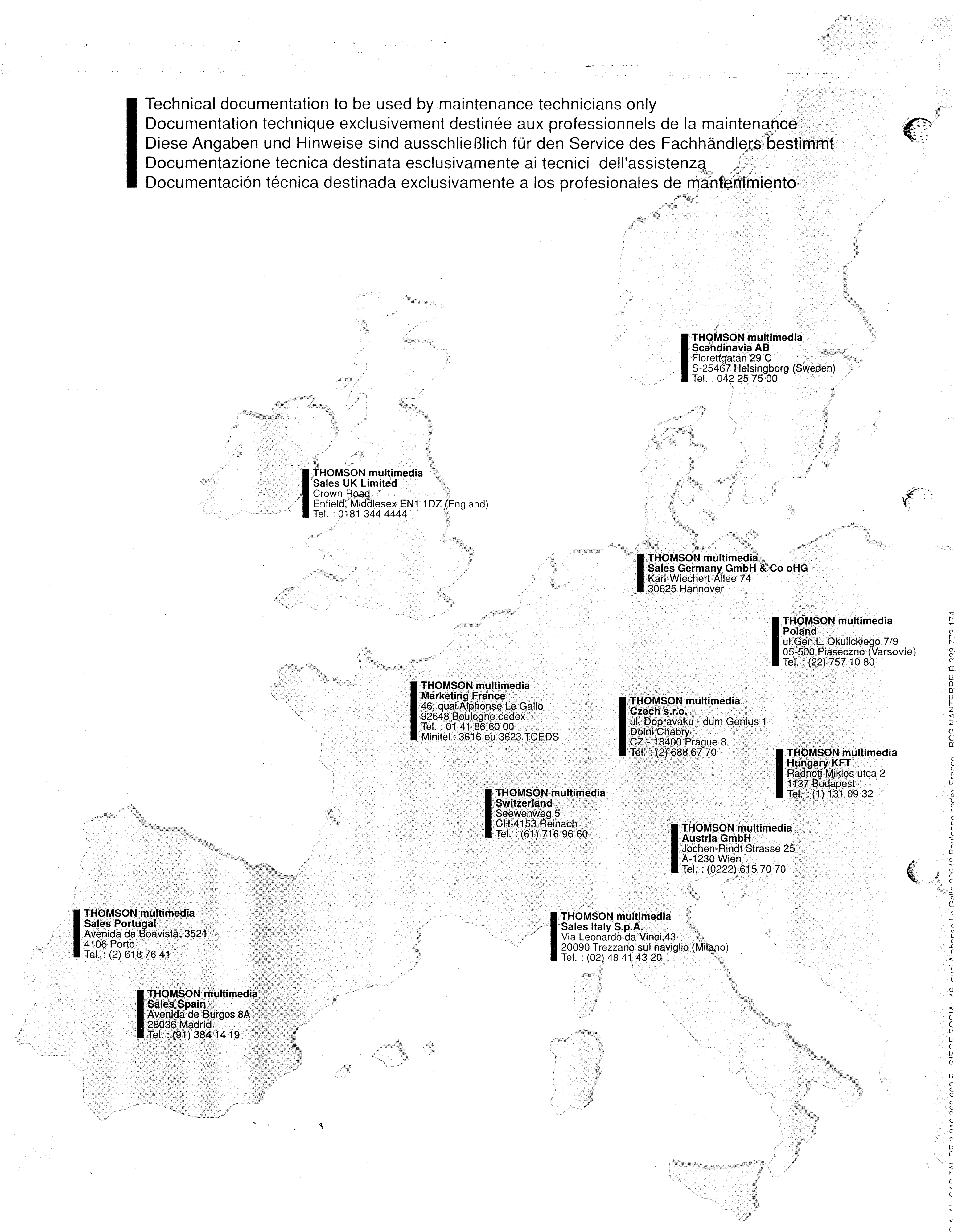

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